

**INTER-SEMIOTIC COHESION ANALYSIS OF MULTIMODAL  
ELEMENTS IN IRANIAN ENGLISH TEXTBOOKS**

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**UNIVERSITY OF MALAYA**

**KUALA LUMPUR**

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TEXTBOOKS**

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## ORIGINAL LITERARY WORK DECLARATION

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## **ABSTRACT**

This study attempts to firstly explore the verbal and visual representations and secondly to investigate textual cohesive devices between the two different semiotic resources, language and image, in Iranian English textbooks for the Middle school students.

To fulfil the aim of this study, three analytical frameworks were adopted to examine the texts. Using Halliday's (1994, 2004) Transitivity System, verbal texts of the data were analysed in order to find out the experiential meaning of the linguistic texts. In the next stage, Kress and van Leeuwen's (1996, 2006) model of Representation Analysis was applied to identify the experiential meaning of the visual imageries in the texts. Finally, textual cohesion of the texts was analysed based on Liu and O'Halloran's (2009) Textual Cohesive Devices. The corpus of the study consists of 24 dialogue sections of all three Iranian English Textbooks which are provided for Middle school students who begin learning English language at this level.

The analysis of the dialogue sections reveals that the sequence of the processes identified in the three textbooks mirror the level of language proficiency to be acquired across the textbooks. Concrete and tangible clauses such as Relational and Material are presented in the first textbook to interact with beginners in learning the English language. Mental process that expresses the inner feelings and deals with more abstract matters and is not about concreteness like the Material process is exclusively found in the third textbook, the book used with the more proficient students of the English language as they would already have undergone two years of learning the language.

The visual narrative analysis of the data discovers that Action process is the most frequently found process in all the dialogues of the three English textbooks. This is justifiable as Action process illustrates what is going on and what is happening in the speakers' stories or in whatever the speakers are doing while speaking. This contributes

towards the English learners' understanding of what is expressed in the verbal texts of the dialogues. The verbal texts of the dialogues are very short and their clauses are obviously simple; therefore, visual imageries take the role of complementing the verbal texts to provide the details though through the visual form. This study would like to introduce what it labels as *communication process* whereby this process is realized by two processes that exist simultaneously. This is unlike previous processes proposed in Kress and van Leeuwen's (2006) framework.

The textual cohesion analysis of the dialogues shows that images and verbal texts are not strongly cohesive. Primarily, all images of the dialogues are only drawings with low colour contrast that remove the reality of the images. Therefore, although the images are identified as providing the details of the dialogues, they could not clearly illustrate the details. This fact somewhat erodes the cohesion between image and the verbal text especially when analysing cohesion in terms of referencing is concerned. Furthermore, most of the images consist of two main participants who are speakers of the dialogues and the topic of their talk is found not saliently illustrated in the image. This shows that the visual structure and the verbal structure are not in complete parallelism. Finally, the analysis reveals that all images and verbal texts are strongly disconnected through solid framing or space between the two modes, and this further decreases cohesion between image and language in the textbooks. In conclusion, this study hopes to provide valuable information for textbook designers and Iranian teachers using the textbooks and to contribute towards research in the field of multimodality.

## ABSTRAK

Kajian ini bertujuan untuk pertamanya menyelidik representasi bahasa dan visual dan keduanya untuk mengkaji peranti paduan tekstual antara kedua-dua sumber semiotik yang berlainan iaitu bahasa dan imej dalam buku teks bahasa Inggeris yang digunakan oleh pelajar tahap “Middle School” di Iran.

Untuk mencapai tujuan kajian ini, tiga kerangka analisis digunakan untuk menganalisa teks. Dengan menggunakan sistem ‘Transitivity’ Halliday (1994, 2004), teks verbal di dalam data dianalisa untuk mengupas makna ‘experiential’ dari teks linguistik tersebut. Berikutnya, model analisis representasi Kress and van Leeuwen’s (1996, 2006) diaplikasi untuk mengenalpasti makna ‘experiential’ imej visual dalam teks tersebut. Akhirnya, paduan tekstual teks-teks tersebut dianalisa dengan menggunakan peranti paduan tekstual Liu dan O’Halloran (2009). Korpus kajian ini terdiri dari 24 dialog-dialog yang terdapat dalam ketiga-tiga buku teks bahasa Inggeris yang disediakan untuk pelajar ‘Middle School’ di Iran yang mula mempelajari bahasa Inggeris pada tahap ini.

Analisis dialog-dialog tersebut mendapati urutan proses yang dikenalpasti mencerminkan tahap penguasaan bahasa yang perlu dicapai dari penggunaan buku teks tersebut. Proses yang konkrit dan ketara seperti ‘Relational’ and ‘Material’ diperkenalkan dalam buku teks yang pertama untuk berinteraksi dengan pelajar yang baru mempelajari bahasa Inggeris. Proses ‘Mental’ yang digunakan untuk menyatakan perasaan dalaman dan yang tertumpu kepada hal yang abstrak hanya terdapat di dalam buku teks yang ketiga, buku yang digunakan dengan pelajar yang lebih mahir dalam bahasa Inggeris kerana pada tahap ini mereka telah pun mempelajari bahasa tersebut selama dua tahun.

Analisis naratif data visual mendapati proses ‘Action’ adalah proses yang kerap kali wujud dalam kesemua dialog di ketiga-tiga buku teks bahasa Inggeris tersebut. Ini

adalah dijangkakan kerana proses 'Action' menggambarkan apa yang sedang berlaku di dalam cerita-cerita penutur atau dalam apa yang dilakukan oleh penutur-penutur apabila mereka sedang bercakap. Ini menyumbang kepada kefahaman pelajar-pelajar bahasa Inggeris tersebut tentang apa yang dinyatakan dalam teks verbal dialog-dialog yang dibaca. Teks dialog tersebut adalah sangat pendek dan klausa-klausa adalah ternyata mudah. Dengan itu, visual imageri memainkan peranan komplementari pada teks verbal untuk memberi maklumat terperinci meskipun dalam bentuk visual. Kajian ini ingin memperkenalkan satu proses baru yang di namakan sebagai proses *komunikasi* dimana proses ini direalisasikan oleh dua proses yang wujud pada masa yang sama. Ianya adalah berlainan dari proses-proses yang dicadangkan sebelum ini dimana kesemuanya di realisasikan oleh satu proses saja.

Analisis paduan tekstual dialog-dialog yang dikaji menunjukkan bahwa imej dan teks verbal tidak mempamerkan paduan yang kuat. Pada asasnya, kesemua imej dalam dialog-dialog tersebut merupakan hanya lukisan dan warna yang digunakan mempunyai kontras warna yang rendah yang kurang mempamerkan realiti imej-imej tersebut. Dengan itu, meskipun imej-imej dikenalpasti sebagai menyumbang maklumat terperinci, mereka pada hakikatnya tidak dapat mengilustrasi maklumat itu dengan jelas. Kenyataan ini sedikit sebanyak menghakis paduan antara imej dan teks verbal terutamanya bila mengesan paduan dari segi rujukan (referencing). Tambahan pula kebanyakan imej terdiri dari dua peserta yang merupakan penutur-penutur dalam dialog yang dikaji dan topik perbualan mereka didapati tidak digambarkan secara menonjol dalam imej yang mengiringi teks verbal. Ini membuktikan bahwa struktur visual dan verbal tidak sejajar sepenuhnya. Analisis juga mendedahkan bahwa kesemua imej dan teks verbal tidak berkesinambungan kerana adanya pembingkaihan yang kukuh atau adanya ruang antara kedua-dua mod tersebut. Ini mengurangkan lagi paduan diantara imej dan bahasa dalam buku teks tersebut.

Akhir sekali, diharap kajian ini dapat memberi maklumat penting kepada pereka buku teks dan pendidik di Iran yang mengguna buku teks tersebut dan juga dapat menyumbang kepada kajian dalam bidang multimodaliti.



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## **DEDICATION**

I wish to dedicate this research to my Gracious Almighty God for granting me health, wisdom and determination and illuminating my road of life with lights and miracles.

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of Study

In Iran, it is rare that language learners have an opportunity to communicate with a native English speaker and English language is regarded as a foreign language (Cheng and Beigi, 2012). Consequently, English textbooks take a significant role in language learning and this point proves the importance of well-organised language textbooks.

The Iranian school system is under the authority of the Ministry of Education and Training and the educational system includes four cycles. The cycles are as follows:

Table 1.1: Cycles of Educational System in Iran

Cycle	Type	Starting Age	Duration (in No. of years)
1	Pre school	5	1
2	Primary school	6	5
3	Middle school	11	3
4	Secondary school + Pre-university	14	3+1

Learning the English Language commences in the first grade of the Middle school level which lasts for three years. The English textbooks of Iranian schools are selected, organized and also prescribed to the teachers and schools by Iran's Ministry of Education. In fact, English language teachers have no other choices rather than the prescribed textbooks. These textbooks are regarded as multimodal texts as they encompass two types of semiotic modes; language and illustration, in order to provide a

more effective path for language learning. Therefore, these books are regarded as important texts since they are the prescribed texts used in the foundation years of learning English in Iranian schools.

This study attempts to examine critical attributes of these multi-semiotic texts and the cohesion between image and language that exist in these texts. It is the vital property of multi-semiotic texts that brings about integration across words and pictures instead of a mere occurrence of these modes. This in turn realises meanings in the text that could enhance learning of English among Iranian students at Middle school level.

This Chapter is outlined as follows; Section 1.1 presents background of study, Section 1.2 provides the statement of research area, Section 1.3 states the purpose of study, Section 1.4 lists the research questions, Section 1.5 discusses the rational of the research, Section 1.6 highlights the significance of the study, Section 1.7 outlines the limitation of the study, Section 1.8 describes the organization of the study and this Chapter ends with a conclusion in Section 1.9.

## **1.2 Statement of Research Area**

Iranian instructional English textbooks have been extensively investigated regarding the way culture is treated in them, the level of authenticity of the books, the dominant gender in English books and ideological values reflected in imported versus home-made English books (Aliakbari 2004, Guilani, Yasin, and Hua, 2011; Gharbavi and Ahmad Mousavi, 2012; Abdollahzadeh and Baniasad, 2010). As such, there are few studies concentrating on textual theme, thematic progression and cohesion in Iranian English Textbooks (henceforth: IETs) (Ebrahimi and Ebrahimi, 2012; Ebrahimi and Khedri, 2012).

Furthermore, the great concentration of research has been on secondary and university English text books but middle school English textbooks which initiates the teaching of basic English skills in Iranian Schools has yet to get enough consideration. Moreover, all these studies only examined the textbooks in terms of language while the images presented in the books are neglected and still no researches have been conducted on cohesion of language and image in IETs. This study will analyse the language and images in Iranian English textbooks used in Middle school level and how these elements cohere to create meaningful texts.

### **1.3 Purpose of Study**

The main aim of the present study is to highlight how the interaction of language and image help in meaning construction and hence contribute to text cohesion in multimodal textbooks. In order to realise the aim, it is essential to firstly identify the visual and verbal elements found in Iranian English textbooks. Then, intersemiotic cohesion among the elements of the texts will be explored. The data of the study will be the dialogues found in the three IETs used in Iranian Middle school.

### **1.4 Research Questions**

The research questions arising from the purpose of the study are:

1. How are the visual elements realised in the dialogue sections found in Iranian English Textbooks?
2. How are the verbal elements realised in the dialogue sections found in Iranian English Textbooks?
3. How do the visual and verbal elements interact with each other to establish cohesion in Iranian English textbooks?

## 1.5 Rationale for the Research

Nowadays, multimodality is prominent across the world through the combination of various semiotic modes such as language, image, gestures, space and music in various texts due to the advent of technology. Multimodality is considered as a “semiotically grounded theory” which identifies different modes of communication (Robertson, 2008).

Movement towards multimodality research derived from Halliday’s (1987) social semiotic approach to verbal context has been founded by pioneers such as O’Toole (1994) and Kress and Leeuwen (1996). They put forward a framework on semantic relation among words, sounds and images to build inter-related systems and structures. Kress and Van Leeuwen (2006) investigated pictures and visual sketch, and O’ Toole (2010) practiced Halliday’s (2004) systemic functional approach to analyse semiotic relations in paintings, architecture, displayed art and sculpture.

In accordance with O’ Halloran (2008), multimodal discourse analysis has taken advantage of systemic functional linguistics to generate theories and approaches to examine a vast domain of practices (e.g. printed texts, three- dimensional sites) in which semiotic resources such as spoken and written language, image, gestures, and architecture merge to construct meaning.

O’Halloran(2008) believes that Halliday’s (2004) metafunction is the most influential principle of systemic functional theory for multimodal discourse analysis (henceforth MDA) since it offers an associated stage to introduce theories of the way semiotic choices interact to make meaning (Kress and Van leeuwen,2006; Baldry and Thibault, 2006). O’Halloran (2008) states that

*“The metafunctional principle is the principle that semiotic resources simultaneously provide the tools for constructing ideational meaning (i.e.*

*experiential meaning and logical relations) and for enacting social relations (i.e. interpersonal meaning). These metafunctions are enabled through the organization of the discourse, which is the textual metafunction of semiosis”(O’ Halloran, 2008:444).*

A multimodal *textbook* can be generally described as a book which interacts with readers by at least two modes for example image and language (Kress and van Leeuwen, 2006). In order to grasp meaning we need to analyze both language and other semiotic resources in the books that function not only independently but also interdependently (Kress and van Leeuwen, 2001, cited by Martinec and Salway, 2005). Studies have been done on multimodal textbooks concerning gender analysis (e.g. Ruth S. Smith, 1995; Sunderland, 2006), using systemic functional analysis along with multimodal analysis (e.g. Robertson, 2008; Guijarro and Sanz, 2008; Guijarro, 2011) as well as genre along with multimodal analysis (e.g. Bateman, J. A., 2008; Taib, 2010) to explore meaning construction and reader’s perception of different modes in a variety of multimodal texts. In spite of the studies been carried out on multimodal textbooks, there is still insufficient research on intersemiotic relationship of the variety of semiotic resources. Therefore, the current research aims to explore how two different semiotic components that is image and language integrate in multimodal textbooks like English textbooks which are composed of images and words to convey the intended message.

Multimodality also considers cohesion among different semiotics resources. Most of the theories regarding cohesion in multimodal texts are derived from the theory of cohesion established by Halliday and Hasan (1976). Van Leeuwen (1991), one of the pioneers who has made great attempts to study cohesion between different modes, investigates visuals and language of television documents and films in terms of conjunctive structure. Lemke (1998) examined scientific articles in which language and diagram are combined to create the text. He claims that no specific system pertaining to intersemiotic relations has been observed in articles to integrate these two semiotic

resources. Liu and O'Halloran (2009) introduce cohesive devices to analyse print media such as advertisements with reference to image and language relation utilizing Halliday's (2004) systemic functional grammar. Royce (1998, 2007) also presents an exhaustive analysis related to intersemiotic relations between images and texts across advertisements in *The Economist* and environmental science textbooks. He thoroughly explains the ideational, interpersonal and textual features of image-text relations in multi-semiotic texts. In this study, intersemiotic cohesion between image and language will be investigated from the textual perspective in order to find out how these elements exist cohesively.

Some studies have been conducted on the relationship between image and language in multimodal textbooks. For instance; Chen (2010) examined primary and secondary textbooks for teaching English as a foreign language in China to examine how evaluative stance is interpreted through the orientation of both linguistic and visual resources in English Language textbooks. He asserts that visual and verbal assessment resources play crucial roles in identifying attitudinal curriculum goals, leading students to the supposed reading and in the joint construction of texts.

Guo (2004) delves into a biology textbook used by second year biology majors studying Bachelor of Science degree. He scrutinized meaning making of various semiotic resources, e.g. images, graphs, and language of the textbook from systemic functional perspective and argues that visuals in the biology text extend and complement the language. His study also manifests the fact that visuals carry different ways of meaning-making either in relation to other visuals or to the verbal texts, therefore the readers need to integrate the meanings perceived through linguistic and visual texts to comprehend perfectly.

Besides the above mentioned studies on multimodal textbooks, research on cohesion between semiotic resources is not sufficient to have a clear understanding of the cohesive devices which integrate a variety of modes and bring meaning to the whole text. The present study will explore cohesion between image and language of Iranian English textbooks which are the two essential modes in language textbooks. Combination of visual and verbal elements of language textbooks would not effectively enhance learning among language learners, specifically beginners, unless these elements are integrated in a cohesive way in order to provide clear meaning of either a concept or the situation in which a particular grammatical point is used in the texts. As stated by Liu and O'Halloran (2009, p. 369), the critical feature of multimodal texts is to create "integration of words and pictures rather than a mere linkage between the two modes".

### **1.6 Significance of Study**

This study is significant as firstly, it attempts to also analyse images in Iranian English textbooks, a mode of the neglected in previous research. Next, even though relatively much research have been carried out in the field of Multimodal discourse analysis, there are still few studies on attributes of intersemiotic semantic relation that "make multimodal texts visually-verbally coherent" (Royce, 2007, p.63). In addition, this research is significant as it will provide particularly Iranian textbooks designers and illustrators more information on how to put illustrations and texts together to create coherent message. In addition, it will also be useful to teachers regarding how to use the multimodal elements in English textbooks appropriately in class and to take more advantage of them. Moreover, it will help teachers and parents with an understanding regarding how to choose appropriate books for their students and children's reading and writing activities. The study can be helpful to the Ministry of Education of Iran to design more effective English textbooks. Finally, the findings of this study can

contribute towards and boost the existing literature in Multimodal discourse analysis specifically to research on multimodal textbooks.

### **1.7 Limitation of Study**

The data used in the present study is limited to Iranian English textbooks of the Middle school specifically to the “*Dialogue*” Section which is the initial Section of each lesson.

This study limits itself to only *Ideational* and *Textual* analysis of the verbal texts. From the Ideational perspective, the visual and verbal elements are identified respectively using transitivity and representation analysis. Textual aspect is considered to analyse cohesion between images and verbal elements using Textual cohesive devices analysis. Thus, the multimodal texts were not analysed in terms of the *Interpersonal* aspect which can investigate the interaction between the author and the reader in terms of language similarly the visual analysis did not include analysing interaction between the producer and the viewer.

Finally, this study does not analyse cohesive devices between image and language from the ideational perspective as it only studies cohesion based on the textual aspect.

### **1.8 Organization of Study**

This thesis is divided into five Chapters. The first three Chapters are contextualizing Chapters, which frame the background, review the literature, sketch out theoretical resources and methodological approaches. Chapter four advances analytical process and discussion. Chapter five deals with conclusion of the study. The following will describe the five Chapters of the thesis.



Chapter two reviews related literature pertaining to the studies on Iranian English textbooks, systemic functional linguistics, multimodality, and researches on intersemiotic cohesion between different semiotic resources.

Chapter three outlines the theoretical resources and describe the methodology of the study. It draws on the systemic functional theory of Halliday (2004) which is a platform for verbal and visual analyses of multimodal texts. Transitivity system of systemic functional theory (Halliday, 2004) will be discussed in terms of verbal analysis of the data. In addition, representation analysis from Kress and van Leeuwen's (2006) framework will also be discussed. Finally, intersemiotic cohesion will be discussed from Liu and O'Halloran's (2009) perspectives. This Chapter also includes description of the research design, data and the methodology in analysing the data.

Chapter four will discuss the result of the analysis of data to reveal the semiotic elements found in the data and the textual cohesion established between semiotic elements.

Chapter five will provide a summary of the findings and draw conclusions about textual cohesion between image and language in Iranian English textbooks. This Chapter will also present implications of the study and recommendations for further research.

## **1.9 Conclusion**

This Chapter has introduced a general overview of the study which will be carried out applying SFL as the central tool. This research is conducted to benefit the Ministry of Education of Iran, book designers, teachers and parents alike. The following Chapter will provide an overview of SFL, multimodality deriving from SFL and intersemiotic cohesion between various semiotic modes as well as discussion on previous research related to the present study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This Chapter provides literature relevant to this research. The key topics covered are Iranian English textbooks (Section 2.2), multimodality (Section 2.3), multimodality and textbooks (Section 2.4), multimodal discourse analysis and SFL (Section 2.5), systemic functional approach to verbal and visual modes (Section 2.6), cohesion (Section 2.7), and intersemiotic approach to linguistic and visual modes analysis (Section 2.8).

#### **2.2 Cohesion**

The idea that a coherent text is not a mere chain of grammatical sentences joined one after the other has been supposed since the mid-1970s. The sentences of a text interweave; each sentence is constructed on the prior ones while simultaneously developing the discourse (Ebrahimi and Ebrahimi, 2012). Halliday and Hasan (1967) suggest that one of the criteria of a coherent text is texture which refers to the feature differentiating a text from non- text. These researchers declare that texture constitutes two aspects; structural and non-structural. Structural aspect is regarded as inter or intra-sentence structure such as thematic progression or thematic organization, while non-structural one is considered as cohesive links between variety of elements presented in different sentences such as conjunctions, substitutions, ellipses and references (ibid).

Coherence is generally a link that makes connection between ideas of a text and puts thoughts in a meaningful way to the reader (Castro, 2004). Halliday and Hassan (1976) regard coherence as internal elements of a text composed of register and cohesion. They also assert that “A text is a passage of discourse which is coherent in these two regards:

it is coherent with respect to the context of situation, and therefore consistent in register; and it is coherent with respect to itself, and therefore cohesive” (1976: 23). Consequently, cohesion is observed as a critical factor of coherence concerning linguistic features of a language in order to create a coherent text from a chain of sentences.

Multimodality also considers cohesion among different semiotic resources. Most theories regarding cohesion in multimodal texts are derived from the theory of cohesion established by Halliday and Hasan (1976). Van Leeuwen (1991), one of the pioneers who have made great attempts to study cohesion between different modes, investigates visuals and language of television documents and films in terms of conjunctive structure. Lemke (1998) examined scientific articles in which language and diagram are combined to create the text. He claims that no specific system pertaining to intersemiotic relations has been observed in articles to integrate these two semiotic resources. Royce (1998, 2007) also presents an exhaustive analysis related to intersemiotic relations between images and texts across advertisements of *The Economist* and environmental science textbooks. He perfectly explains the ideational, interpersonal and textual features of image-text relations in multi-semiotic texts.

Jewitt (2003) is one of the scholars who opened a new Chapter in relationship between image and language by departing from page to screen. She carried out a research on intersemiotic relation between language and image of the “*Novel as CD-ROM*”. Her findings disclosed that spatial relationship between visual and verbal elements of the screens as well as framing are also the resources of meaning making; for instance, framing indicates the connectedness and disconnectedness of the elements of a screen. This research also investigates the feature of framing as one of the cohesive ties to find out how connected and cohesive the visual and verbal elements of the data are.

Guo (2004) explores a biology textbook used by second year biology majors studying Bachelor of Science degree. He scrutinized meaning making of various semiotic resources, e.g. images, graphs, and language of the textbook from systemic functional perspective and argues that visuals in the biology text extend and complement the language. His study also indicates that visuals carry different ways of meaning-making either in relation to other visuals or to the verbal texts, therefore the readers need to integrate the meanings perceived through linguistic and visual texts to comprehend perfectly.

In another study on science textbooks, Jones (2006) declares that cross-link between image and language leads to more complicated reference patterns. She explains that “a participant may be introduced in the main text or caption, presumed in the image, re-introduced in the text and presumed again in the image” (p.241). Jones (2006) reveals that combination of intersemiotic reference with framing, juxtaposition, font and colour which are “system of textual meaning on Display stratum” (p.241) helps the union of intersemiotic meanings in multimodal texts. Moreover, it results in a greater texture density in a multimodal text than a text which only includes verbal component and such density of texture allows the semantic layers of logical, experiential and interpersonal to be obtained. The present study also explores the pattern of intersemiotic reference between image and language of Iranian English textbooks as one of the cohesive device which plays influential role in textual cohesion (O’Halloran, 2005).

Subsequently, more studies have been carried out to explore relations between various semiotic resources such as language, music, picture, diagrams, and etc. Scholars like Fei and Halloran(2010) have researched on how the combination of these semiotic components help to structure social issues and affect viewers/reader’s perspectives. They adopted, Systemic Functional Multimodal discourse approach to investigate

*“inter-frame relations”* as well as ideologies determining the semiotic resources in Teacher-recruitment film advertisement commissioned by Singapore Ministry of Education. Moreover, the embedded meanings in such an advertisement are discussed in order to unfold the prevailing ideologies present in the education system of Singapore. The study suggests the fruitfulness of the *“visual semantic stratum”* to explore *“inter-frame relations”* at the discourse stratum. The researchers applied macro analysis for transcription of the text and micro analytic approach for the analysis of the meanings and ideologies embedded in this advertisement film.

In this research, intersemiotic cohesion between image and language is investigated since cohesion of a text would allow learners to understand the relationship between the presented ideas in different semiotic modes in a meaningful way (Guo, 2004). Key concepts of the study have so far been reviewed and the following section will review studies that analysed intersemiotic relations in multimodal texts.

### **2.3 Multimodality**

The theory of multimodality is founded on the basis of social semiotics. As Kress (2010) stated, the function of each mode in a multimodal text, the relationship between different modes as well as the main entities of a multimodal text can be elaborated by social semiotics. It is believed that traditional semiotic theories are established upon the viewpoint of fixed conventions in communication via sign systems (Kress and Jewitt, 2003). Kress and Jewitt (2003) believe that “In these theories, the system is ‘there’; it is stable, and its stability is both produced and sustained by social power, which presents itself as convention” (p. 10). Robertson (2008) claims that social semiotics certifies the features of human organizations and alteration. From this point of view, signs are regarded as a message conveying an arbitrary and stable meaning. According to Lemke (1990) social semiotics is

*“...a theory of how people make meaning. It asks how we make sense of and to one another and how we make sense of the world. It concerns itself with everything people do that is socially meaningful in a community: talking, writing, drawing pictures and diagrams, gesturing, dancing, dressing, sculpting, and building – in effect, everything” (Lemke, 1990: 186).*

Social semiotics explains that people tend to utilize the resources which are accessible to them in a particular socio-cultural situation in which they produce signs and they alter the resources while applying the signs (Kress and Jewitt, 2003). As Siegel (2006) asserted, “Semiotics is uniquely suited to understanding multimodality because it offers a way of thinking about meaning and text that does not privilege language over other sign systems” (Siegel, 2006:68).

An applicable description of the term “mode” and also a clear discussion on the merging of multimodality and social semiotics is provided by Kress and Jewitt (2003). They propose that “mode” is a concept referring to a “regularised set of resources” to construct meaning such as image, gesture, music, gaze, speech and sound-effect. It is broadly understood that modes are the essence of the culture practices in forming substances into resources which are represented. Subsequently, the creation of resources leads into “regularities” formed by “conventions” which is understood by the peoples following a culture and applicable by them for communication and representation (ibid). The central idea of social semiotic perspective expresses that each mode possesses its own aptitude and potentialities being suitable for some affairs but not for others (Robertson, 2008). “The affordance of a mode can at one level be understood as what it is possible to express and represent readily, easily, with a mode, given its materiality and given the cultural and social history of that mode” (Kress and Jewitt, 2003:14). Acquaintance to the ability of each mode and awareness about restrictions existing in a culture determine how individuals select the modes to be able to properly send a message. Within each mode, the channel and layout of the message bears social and

cultural meanings; thus, it can also effectively contribute to the comprehension of the message (Robertson, 2008).

Although each mode possesses its own affordance, it is essential to take into account that modes generally appear accompanying other ones. It is noteworthy that fusion of different modes appear in such a way that each one does effectively not only its own part but also in association with other modes to complement each other and this fact makes multimodal communication powerful (Hall and Nelson, 2005). Kress and Jewitt (2003) affirms that the fusion of modes contribute to the whole message. They argue that the meaning inferred from a message is conveyed through all the involved modes. In another word, different facets of meaning are transferred by each of the modes and each mode is responsible for one part of the message (ibid).

To sum up, a multimodal text is not mere merging of different modes but the integration of them in a cohesive text in which the affordances of modes create the meaning (Robertson, 2008). Therefore, the present study will undertake a multimodal analysis of Iranian English textbooks which are composed of two semiotic modes, language and image to find out whether these semiotic resources are integrated cohesively.

## **2.4 Multimodality and Multisemiotic Books**

A multimodal textbook can be generally described as a book used in classroom which interacts with readers by at least two modes for example image and language. Nowadays, to grasp the meaning we need to analyze both language and other semiotic resources that function not only independently but also interdependently (Kress and van Leeuwen, 2001). The present study is on Iranian English textbooks which are indeed multimodal books as they include language and many pictures.

### **2.4.1 Multimodal Textbooks**

School textbooks are intended to make students literate and literacy can be improved through different channels like language, image, graphs, gesture and etc. As Jones(2006) claims, children combine the meanings of different modes like; visual, verbal, gestural and audio resources since early ages. Therefore, literacy does not mean mere verbal literacy; but all over the world, literacy teaching is still drawn on written language (Kress, 1997; Lemke, 1998).

Kress and van Leeuwen (1996) studied science textbooks which contain photographs, graphs, diagrams and drawings to delve into visual grammar. The researchers analyzed meaning of visual elements in a high school textbook of a course which has been taught for almost five decades and deduced that a deviation from verbal to visual has been seen in textbooks in recent years; in fact, the visuals have gained greater dominance. Shifting from language to image coincides with great changes in science; thus, it is required to restructure teaching modes and mediums to educate students for reading and creating visuals (ibid). In another study, Kress (1997) explored science textbooks again and found that the function of verbal and visual elements has been transformed. The findings indicate that prior textbooks relied on verbal information and images did not have any role in providing new information. Yet, images in recent textbooks act more dominantly in transferring the new information (ibid). He proposes “an instance of a new code of writing and image, in which information is carried differently by the two modes” (p. 65).

Based on an examination on meaning of visuals as well as language in a scientific text by Lemke (1998), it is suggested that the scientific concepts are presented “simultaneously and essentially verbal, mathematical, visual-graphical, and actional-



operational” (p.87). He claims that scientist interaction is possible through merging and synthesizing all these resources; therefore, visual-graphical representatives such as diagrams, graphs, tables, equations and drawings take a crucial role in textbooks and articles.

Likewise, Guo (2004) delved into how multimodal meaning making of graphs, visual images and language of biological textbook articles which contribute to non-native English learners studying biology to deal with English for Specific Purposes or English for Academic Purposes. To fulfill the aim, he utilized the SFL based theories of Multimodality and analyzed the texts in terms of three dimensions; interpersonal, ideational and textual meta-functions and he also investigated the reading path followed by university students while reading a single biological text which includes different semiotic modes. He claimed that the graphs and images are not only excessive in biological articles but also they play crucial role for readers to understand the texts since language per se is not adequate to transfer information. Besides, his study shows that each semiotic mode delivers different ways of meaning making in terms of not only visual and verbal relations but also distribution and interpretation of “combinations of ink or paint”. He believes that it is essential for non-native university students to learn visual grammar along with English grammar as the visual displays are required to supplement verbal texts to create a meaningful text.

In an investigation on primary and secondary textbooks designed for teaching English as a foreign language in China, Chen (2010) explored how evaluative attitude is interpreted from the co- deployment of language and image. Considering linguistic and visual complementarity and co-instantiation, she discovered that linguistic and visual appraisal blocks are significant in realizing different attitudinal curriculum goals, leading children to the putative reading and also in providing concerted texts. Chen’s

(2010) work possesses a remarkable value in terms of discussing semantic relation of image and language since she focuses on the moral and attitudinal sense that can be detected in images but not in language. Therefore, her study affirms that image and language semantically cooperate with each other to enhance children's understanding of the raised topics. Besides research on textbooks, picture books, specifically pedagogical picture books, have been described, analyzed and categorized in terms of the integration of visual and verbal elements during a few past decades (Nodelman, 1988; Nikoajeva and Scott, 2000; Sipe, 1998 cited by Robertson, 2008). Similar suggested theories concentrate on how readers of picture books make relation between verbal and visual information in a text (Nodelman, 1988; Sipe, 1998). These theories propose that readers initiate to interpret one sign before shifting to another one; in other words, readers start interpreting for instance visual elements and then move on to verbal ones or vice versa. However, this fact incites readers to reinterpret one sign while relying on the information perceived by the other sign. The knowledge achieved from the processing of one page creates a schema which leads the reader to interpret the next page and so forth.

Further, the ways in which pictures and language interact in picture books were introduced by Nikolajeva and Scott (2000). They provide a classification of the relationships of image and language as '*Symmetrical*', where the language and image convey the same meaning; '*Enhancing*', where one mode expands the meaning transferred by another; '*Counterpointing*' where image and language cooperate to convey meanings exceeding the scope of one of the modes alone and '*Contradictory*', where image and language present contradictory information.

In a study, Guijarro and Sanz(2008)examined linguistic resources and illustrations of a picture book titled "*Guess how much I love you*" in terms of "field", "tenor" and

“mode” applying Halliday’s (1994) metafunctional approach and Kress and van Leeuwen (2006)’s visual social semiotics. The analysis of their study reveals that identified ideational elements of language affirm the presence of obvious correspondence between the processes existing in verbal and visual components. Interpersonal analysis of illustrations indicates that the visuals offer information to the readers rather than interacting with the reader. In terms of social distance, long shots are predominant portray of the characters which convey distance and objectivity; however, the representative participants are placed in foreground to create intimacy between characters and the viewers. Discussing compositional analysis, the authors proposed that the images of the story do not follow the prototypical given/new structure –left to right– suggested by Kress and van Leeuwen (2006), but new/given pattern. Guigarro and Sanz (2008) declare that the lack of framing in visuals encourages the children to view the tale from inside. The salience of the participants in the images is depicted by their size, for example the hares are portrayed in large size as the trees. Moreover, verbal analysis of the story displays that there is a clear relation between the departure point of the clause as theme and the main participants –hares– of the story. Such association is also created in visual illustration through placing the hares in centre position of the composition; therefore, verbal and visual patterns of the story are in vivid parallel structure.

All in all, the belief that combination of more than two semiotic resources can definitely increases viewers’ understanding and awareness has been established. Prior studies emphasize on the role of each semiotic resource in developing a text and how they integrate to create a more comprehensible unified text which greatly contributes to learner’s knowledge expansion (Guo, 2004; Chen, 2010). In realizing the function of visuals in texts as established by the research reviewed, , the present study not only emphasizes on the significance of the visual images in texts but it also aims to highlight

the importance of meaningful combination of image and language in language learning. Consequently, this study explores Iranian English textbooks as multimodal textbooks to examine how semiotic resources merge together to make meaning.

#### **2.4.2 Iranian English Textbooks**

Textbook is an instructional material which presents knowledge in a systematized and clear way for educational purposes. Razmjoo (2007) refers to textbooks as crucial tools specifically for learning and teaching foreign languages because they are the mediums to conduct teaching process.

Accordingly, text books have attracted serious attention in terms of research in various topics since early academic research on school materials. In line with the studies on textbooks over the world, researches have also been conducted on Iranian EFL textbooks at different levels of education. A review of previous studies on Iranian EFL textbooks will be presented below.

Thematic progression which are widely employed for teaching English as General Purposes and Specific Purposes courses in Iranian universities at Bachelor degree were examined by Ebrahimi and Khedri (2012). For this study, various patterns of thematic progression existing in different books were identified and the frequency of the patterns in the textbooks was tallied. According to the result of the study, linear thematic progression is the pattern more extensively utilized in the textbooks comparing to other patterns. Researchers suggest that the use of linear pattern contributes to constructing a cohesive text since this pattern expand related ideas and develop cohesion among sentences. On the other hand, Ebrahimi and Khedri (2012) believe that the writers of the textbooks tend to use greatly constant pattern of thematic progression which leads to redundant and repetitive paragraphs discussing on the same topics. Absence of split

theme/rheme in all textbooks affirms that the writers of the books are not aware of the effectiveness of such patterns in order to build up a logical and coherent text which allows readers to comprehend texts better. Ebrahimi and Khedri (2012) claim that textbook writers need to be familiar with the significance of the thematic progression which can lead readers to a logical route created through a cohesive text; furthermore, it will help them to comprehend the text. On the other hand, this study proposes that readers as well as writers need to be aware of the different patterns of thematic progression either to effectively comprehend a text or follow a flow of ideas inserted in a passage. Ebrahimi and Khedri (2012) examined thematic progression of English textbooks in exclusively verbal texts while the present study also takes into account images and the intersemiotic cohesive devices to explore cohesion between two different semiotic resources that are language and image.

A few studies have been carried out on analysing the conceptual representation of either language or images or both modes in English textbooks. Such studies have made attempts to reveal dominant social beliefs which have also penetrated into English textbooks. For instance, Iranian English Language textbooks used in Middle school were investigated by Cheng and Beigi(2012) in terms of religious concepts in language and illustrations presented-directly or indirectly-in textbooks. Chen and Beigi (2012) propose that a good English textbook should offer the culture of target language to language learners instead of merely presenting language. Their study revealed that although there are different religious groups in Iran, the language and illustrations predominantly depict Islam and specifically Shi'ite religion and culture in the English Language textbooks used. These textbooks bear the religious concepts like covering of depicted women, lack of delineation of male-female couples represented in isolated places or lack of depiction of girlfriend-boyfriend in illustrations of the textbooks and numerous occurrences of words such as mosque, prayer, and Holy shrines (tombs of

Shi'ite imams). Cheng and Beigi (2012) argue that Islamic doctrine is covertly inserted in Iranian educational system through illustrations and word options in the English textbooks. This research acknowledges the fact that illustration and words are potential companions playing essential role along each other to transfer the intended message. Moreover, combination of image and language can effectively contribute to learning culture but unfortunately Iranian English language textbooks has not considered the culture of the target language and the only element which has been strictly taken into account is grammar of the language, in other words, only structures and lexicon have been given more attention. It might be due to the fact that Iranian educational system prefers to adhere to the Islamic laws rather than reflecting Western culture.

Gharbavi and Mousavi(2012a) take into ground Halliday's Systemic Functional Linguistics to scrutinise thematic structure, last stressed element and the role of participants in terms of transitivity system in the flow of clauses presented in Iranian high school English textbooks to examine sexism in the content of the textbooks. In another word, the researchers intended to explore language gender bias. They believe that gender discrimination may psychologically affect the learners' performance. It was found that the writers of Iranian high school English textbooks tend to place a great number of males either in Theme/ Rheme position or as the last stressed element. Additionally, participant roles taken by males vividly prove the existence of gender bias in these books; for instance, comparing with female participants, more males take the essential participant roles of the processes such as 'Actor', 'Goal', 'Senser' and etc. They discuss that English textbooks are under the authority of the Iran Ministry of Education and their content encompasses critical executive policies which lead to the objectives of the educational system. Therefore, such textbooks can mirror the social status governing the society. Findings of the study can affirm the point that the connotative message perceived by students is that males are in a higher social position.

Moreover, Gharbavi and Mousavi (2012a) claim that writers of textbooks encode their own ideology through manipulating the language to achieve their own desires. Seemingly, writers of English textbooks may desiderate to depict men as active and strong beings whereas females as passive and incompetent community (ibid).

Gharbavi and Ahmad Mousavi (2012b) further undertook a content analysis on Iranian English textbooks to delve into gender discrimination in two phases; visibility of different sex as well as occupational roles taken by males and females, not only in text but also in illustrations. The frequency of male and female presence in verbal and visual text reveals that visibility of males significantly outnumbers over females. In addition, both visual and verbal texts analysis also presented inequality in the distribution of occupational roles between males and females. Only limited roles are assigned to women such as “mother”, “tailor”, “nurse” and “teacher”, while men are representatives of a wide range of careers. Gharbavi and Mousavi (2012 a, b) suggest that such evidence affirm the patriarch culture governing the society which determines people’s beliefs and forms stereotypes. Consequently, the writers, illustrators and designers of such society are influenced by dominant cultures and beliefs and their works reflect the way they believe. In comparison to Gharbavi and Mousavi’s (2012a) study, the researcher of this study probes into English textbooks from ideational perspective to see how participants appear in image and language. Such investigation would reveal social beliefs and dominant norms running in Iranian society in which masculinity is one of the polemic issues.

In another study, images in Iranian English textbooks draw Cheng and Beigi's(2011) attention in terms of the visibility of disabled students. The analysis of these English textbooks suggested that illustration of disabled people is under-represented. The authors assert that the textbooks place such students in an unfavourable position and

eternalize their invisibility. Cheng and Beigi (2011) remark that educational textbooks including English textbooks reflect the views leading the society, so lack of students' knowledge about disability signifies insufficient social attention to disable people. It is also suggested that an inclusive education should embrace all groups of a society even the minorities like people with disabilities and inclusion of images and topics depicting people with disabilities. This will help students to be knowledgeable about such people and learn how to treat them in society.

Iranian English textbooks also attracted researchers' attention to probe the position of culture in textbooks. Aliakbari (2004) states that language learning textbooks bear a certain view towards the world adopted from the author's cultural aspect. Along with this assumption, he carried out a content analysis on Iranian high school English textbooks to explore how deeply the culture of target or first language is taught by Iranian English textbooks and also how sufficiently the students obtain intercultural communication skills. 'New words' and 'Reading' Sections of the textbooks were encoded based on the cultural meaning which can be inferred by either contextualizing the new words in sentences or the entire reading texts. The results of this study found that neither in New words nor in Reading texts, the traces of culture are conspicuously present in English textbooks. A great portion of the sentences and passages are general and culture free and do not refer to specific person, place, country or events. Accordingly, the students are not able to acquire intercultural skills through such textbooks. The researcher claims that the topics of Iranian English textbooks are restricted to particular scientific fields and other areas are under presented. In addition, he observed that most of reading passages lack recognizable resource to offer authentic information to students. Unlike the mentioned studies on Iranian English language textbooks, one phase of the present study aims to explore the role of participants in images through Symbolic Attributive Analysis (Kress and van Leeuwen, 2006) which



characterize participants based on approved norms and cultures shared in Iranian society. Such general information about cultures will help to accurately define visual participants and their actions in English textbooks.

As literature review of Iranian English textbooks indicates, there are very few studies on cohesion of verbal texts of these textbooks and that relation of image and language in terms of cohesion has been neglected. To fill the gap, this research will look at the cohesion between the two semiotic resources from different aspects. On the other hand, there are studies on images in English language textbooks that exclusively focus on conceptual elements presented in visual imageries to examine the depicted culture and norms. However, this study takes into consideration not only how visual images illustrate the materiality and mentality of Iranian English textbooks but also how they are parallel with language used in texts.

## **2.5 Multimodal Discourse Analysis and SFL**

This study primarily aims to undertake multimodal discourse analysis (MDA) from Systemic Functional perspective. The scholars (e.g. Lemke, 1998; O'Halloran, 2005, 2011; Jones, 2006; Liu and O'Halloran, 2009 and etc.) have taken into account MDA within Halliday's Systemic Functional Theory (SFL) since 1990s. Derived from Halliday's social semiotic approach to verbal context, movement towards multimodality research has been founded by pioneers Michael O'Toole (1994), Gunther Kress and Theo van Leeuwen (1996). They put forward framework on semantic relation over semiotic resources to build inter-related structures and systems. Relying on Halliday's (1994, 2004) Systemic Functional perspective towards language, Kress and Van Leeuwen (1996, 2006) investigated pictures and visual sketch and provided an exhaustive description of the '*functional grammar*' of the visual elements in a text. They concentrate on the paradigm of images to develop an appropriate and effective

alternative to the traditional French structure which is based on syntagm - for instance the works carried out by Barthes (1968, 1970, and 1977 (cited by Sumin Zhao, 2011)).

O' Toole (1994, 2010) also practiced Halliday's systemic functional approach in order to focus on the concept of meta-function and rank. He proposed exhaustive description of meta-functions in displayed art; paintings, architecture, and sculpture. In fact, O' Toole (1994, 2010) amplified multimodal discourse analysis from a printed page to a three dimensional space.

Extending the systemic functional theory towards MDA draws in generating theories to analyse a broad spectrum of texts from printed to electronic ones or to delve into 3D sites or other domains of practices where various semiotic resources like language, symbols, images, architecture, gesture and other resources integrate for meaning making. Systemic functional approach is regarded as a "well placed" theory to cater theoretical frameworks for MDA as Halliday (1978) refers to SFL theory as a social semiotic theory in which the meaning relies on context (O' Halloran, 2008). So far, prominent researchers such as Halliday and Matthiessen, (1999, 2004) and Martin and Rose (2003) dealing with systemic functional theory have introduced an apprehensible approach to language and have not addressed other semiotic resources. Studies on MDA broaden the scope of research for discourse analysts as well as SFL scholars; hence, plenty of research has been carried out to investigate the semiotic resources in human territory such as colour (Painter, 2008; Kress and van Leeuwen, 2001); action (Martinec, 2001); mathematical symbols (O' Halloran, 2005); gestures (Martinec, 2004); music and sounds (Van Leeuwen, 1999, 2009); topography (Van Leeuwen, 2006; Baldry and Thibault, 2006).

O' Halloran (2008) believes that Halliday's (2004) metafunction is the most influential principle of systemic functional theory for multimodal discourse analysis (MDA) since

it offers an associated stage to introduce theories of the way semiotic choices interact to make meaning (Kress and Van leeuwen, 2006; Baldry and Thibault, 2006).

According to O' Halloran (2008)

*“The metafunctional principle is the principle that semiotic resources simultaneously provide the tools for constructing ideational meaning (i.e. experiential meaning and logical relations) and for enacting social relations (i.e. interpersonal meaning). These metafunctions are enabled through the organization of the discourse, which is the textual metafunction of semiosis” (O' Halloran, 2008:444).*

Indeed, the meta-functional perspective caters a principle in order to explore meta-functionality of semiotic modes, likewise to examine the forms of the interaction between semiotic resources in multimodal discourses to achieve specific objectives for instance; to encourage a customer to purchase goods; to establish knowledge in educational textbooks; to abet people to rampage under the name of religious believes (ibid). As O' Halloran (2008) proposed

*“The SF-MDA approach is concerned with the meaning potential of semiotic resources distributed across strata (i.e. context, discourse semantics, lexicogrammar and phonology, and typography/graphology) and the theory/analysis of the integrative meaning of semiotic choices in multimodal discourse. The SF-MDA approach has, for example, led to the study of the functionality of language, visual images and mathematical symbolism in mathematical discourse, and theorization of how linguistic, visual and mathematical symbolic choices combine to construct reality in ways which extend beyond what is possible using linguistic resources alone” (O'Halloran, 2008:444)*

Furthermore, following the above mentioned assumption, SF-MDA gives a transdisciplinary link across discrete areas of study. For instance, “the SF-MDA approach to mathematical discourse involves mathematics, linguistics, semiotics, studies on visualization and mathematics education” (ibid). The present study takes into account SF-MDA approach and explores the relationship between visualization and linguistics in order to imply the merits of such intersemiotic integration for language learning.

## **2.6 Systemic Functional Approach to Verbal and Visual Modes**

According to O'Halloran (2008), verbal and visual elements of a text are two distinct forms of semiosis which are different from each other in a basic point. Verbal text generally develops syntagmatically as a series of elements processed one after the other and meaning is gradually concluded as the text develops (ibid). O'Halloran (2008) discusses that SFL deals with the sequence of linguistic parts (words, phrases, clauses and paragraphs) that constitutes the levels in which a text unfolds.

According to SFL theory, language is consisted of two strata; content plane which includes lexicogrammar –phrase, clause and clause complex– and discourse –paragraph and text, and expression plane –phonology and typography in written or spoken language (Martin, 1992; Halliday, 2004). Formulating the systems of discourse and lexicogrammar possessing clear metafunctional approach is possible. For instance, Theme is essential to form textual meaning, logico-semantic relations to create logical meaning, Transitivity for experiential meaning and Mood is critical to establish interpersonal meaning. SFL theory will be explained in details in Chapter 3 in Section 3.2.

Much research has been devoted on systemic functional linguistic analysis of different kinds of texts. One such study analysed Language Arts textbooks in terms of lexical density, lexical variation, process types, grammatical intricacy and clause complexes. Presnyakova(2011), the researcher claimed that textbooks of higher grade levels encompass more complicated language of instruction. This research also explores the verbal elements in the dialogues of Iranian English textbooks in terms of participant, process and circumstance using Systemic functional analysis.

As mentioned earlier, SFL is concerned about the sequence of the linguistic elements which comprise the layers of a text (O'Halloran, 2008), while the whole image is primarily perceived over the parts of the image which may constitute a chain of happenings within the overall work (Ivry and Robertson, 1998). The factors which need to be taken into account include the size of the picture as well as the proportion and mass of the whole comparing to the parts of a visual image (O'Halloran, 2008). Wertheimer (1938), one of the pioneers of Gestalt school of psychology, asserts that perceiving the whole image is based on the relationship existing between the parts of the image rather than the distinct characteristics of each part. As a result, the image is analysed and perceived by scanning the parts which are related to each other in the whole image.

According to O'Toole (1994), Systemic Functional approach to image constitutes of two strata as well; Content stratum which refers to systems of visual discourse and grammar for the whole picture and its individual components and also expression stratum which refers to the material realization systems in image. O'Halloran (2008) extends O'Toole's model (1994) to encompass the systems by which the image can be realized in the Systemic Functional-Multimodal Discourse Analysis (SF-MD) theory. The stratum of expression for image is considered in parallel with the one for language (ibid); while, the content stratum for visuals is not alike discourse and grammatical systems of language. The content stratum including the visual grammar and discourse systems materializes three meta-functions labelled *Representational*, *Modal/Interactional* and *Compositional* (Kress and van Leeuwen, 1996, 2006; O'Toole, 1994, 2010); these three meta-functions will be elaborated in Chapter 3 Section 3.2.

There are studies that manifest how meanings shape in image and language in multimodal texts utilizing SFL theory. Such studies highlight on the presence of image

which bears an essential role in meaning construction in a whole text. For example, Feng and O'Halloran(2012) examined visual images presented in two comic books, one American and the other Japanese, to explore how emotive meaning such as anger, happiness, sadness, and surprise is represented in images through the semiotic choices of '*facial expression, touch and body orientation*'. Following Halliday's (2004) social semiotic lexico-grammatical approach, the authors formulate facial expression, body orientation and touch as "interrelated systems of meaning" which are considered paradigmatic. Complementing Forceville's (2011) '*cognitive metaphorical interpretation*', Feng and O' Halloran (2012) theorize the emotive behaviour representations in visual images as *partial iconic representations* of behaviours in real life and such representations are indexes of emotions. The findings of the study suggest that facial expression is more significant to encode basic emotive behaviours with considerable accuracy and other resources, touch and body orientation are able to encode the "*valence, activation and intensity of emotions*". Eventually, the analysis of resources in terms of representation of emotion in images of comic books from the social semiotic approach is helpful for elaborating and understanding the way emotive meaning is developed in visual illustrations.

## **2.7 Intersemiotic Approach to Verbal and Visual Modes**

The central theory which explores the processes leading to semantic convergence ('co-contextualizing relations of parallelism') or semantic divergence ('re-contextualizing relations of dissonance') because of interaction of different modes in a multimodal text is the *Theory of Intersemiosis* (O' Halloran, 2008; Thibault, 2000; Royce, 2002). A great number of scholars have attempted to theorize intersemiosis, therefore intersemiosis theories have taken different forms.

Intersemiotic Complementarity of linguistic mode and images is suggested by Royce (1998), where the linguistic mode semantically complements the visual one or vice versa to create a single text. Royce (1998) introduces various meta-functional based methods through which language and image act intersemiotically. He utilizes classification of lexical cohesion identified by Halliday and Hasan (1985) and Halliday (2004) to form ideational meaning. The categories consist of intersemiotic synonymy, meronymy, repetition, hyponymy, antonymy as well as collocations existing across linguistic and visual modes. He also takes into account interpersonal meaning created by the interaction between the text and reader/viewer through Modality and Mood which act to fortify attitudinal and address dissonance or congruence. Textual meaning is explored in Royce's (1998) model through the layout, information value, framing, salience, reading paths and intervisual analogy.

A meta- theory is proposed by Lemke (2000) to elaborate the cause of intersemiotically occurring at semantic expansion of meaning. Lemke argues that visual and language modes are different in semantic orientations. From this perspective, language creates the typographical aspect of reality; i.e. a symbolic system of reality pertaining to difference in type or category. The system of *transitivity* (refer to Chapter 3 Section 3.2.1) evidently indicates the tendency of language for explicit distinctions. Where the differences formulate in terms of degree, perception of visual images is regarded as a topological phenomenon. The model which Lemke (2000) conforms is acquired from biology for theorization of multimodal semiosis as an ordered dynamical system that is in a hierarchical manner. Lemke (2000) hypothesizes that the occurrence of semantic expansion across several semiotic resources is due to the fact that mapping over topological and typological types leads into new planes of organization in semiotic system which results in a new room of interpretation. According to Lemke (2000), semantic expansion that occurs in a multimodal discourse as continuous variation is

mapped to discrete variants and vice versa. He discusses parallel mapping (i.e. discrete variations to discrete variations as well as continuous variants to continuous variants) does not lead to a new qualitative phenomenon.

In another study, Cheong (2004) examined print advertisements concerning the ‘*Bi-Directional Investment of Meaning*’ over language and images to conceptualize semantic development of ideational aspect. The findings of the study reveal that the *Conceptualization propensity* (CP) of the visual and verbal choices yields the *Interpretative Space* (IS) where the *Semantic Effervescence* (SE) is able to be appraised. Contextualization of the relations offering a space for interpretation is foregrounded in Cheong’s theory.

O’Halloran (2005) delves into mathematical discourse relying on Royce’s (1998) approach to examine how the intersemiotic mechanisms formulate where meaning expansion of re-contextualizing and co-contextualizing relations appear across language, symbols and images interacting with each other. She suggests systems meta-functionally based for intersemiosis to analyse the mathematical discourse. The discourse system consists of *Intersemiotic Ideation* for ideational meaning, *Intersemiotic identification* and *Intersemiotic Mixing* for textual and *Intersemiotic negotiation* and *Intersemiotic appraisal* for Interpersonal meaning. In this study, O’Halloran’s (2005) Intersemiotic Identification will be applied to identify presented participants in image and language of the corpus. For detailed information pertaining to Intersemiotic Identification or Reference (Liu and O’Halloran, 2009), refer to Chapter 3 Section 3.3.2.

Utilizing variety of multimodal discourse resources such as print advertisements, anatomy and marketing textbooks, news websites and etc. where language and image co-occur, Martinec and Salway (2005) describe the relations between image and



language based upon combination of two types of relations; logico-semantic relation of image and language as well as their relative status which is drawn on Halliday's (1994, 2004) status and logico-semantic relation between clauses. They propose that language-image relations can be in "equal" or "unequal" status. Unequal status takes place where one of the modes is "subordinate to the other"; in other words, only part of the verbal text is related to the image and vice versa (Martinec and Salway, 2005:344). Equal status of language- image relations refers to the status in which a whole language text is related to the whole image. This status is broken into "complementary" and "independent".

In independent status, language and image provide parallel information and each mode forms its own process; however, they do not integrate to structure "a larger syntagm". In contrast to independent status, complementary status takes place where image and language combine "to form part of a larger syntagm" (Martinec and Salway:344); in other words, image and language take the role of participants of a process type. Martinec and Salway (2005) realize the relatedness between verbal text and image relying on Martinec's (1998) "componential cohesion" that connects components present in language and image; in other words, componential cohesion relates image and verbiage in terms of process, participants and circumstances.

Referring to logico-semantic relations, Martinec and Salway (2005) apply two types of semantic relation including "expansion" and "projection". Similar to Halliday's (1994, 2004) major types of expansion, they also identified three types; "elaboration", "extension" and "enhancement" create relation between verbal texts and images. "Elaboration" is further divided into two types; "exposition" where the verbiage and image are at "the same level of generality" and "exemplification" where the modes are in different levels (p.350). "Extension" relationship occurs when either image or

linguistic component add related new information to the other one. The last relationship realized in the category of “exposition” is “enhancement” in which image qualifies verbal mode circumstantially or vice versa.

Martinec and Salway (2005:325) stated that two types of projection appear in image-text relationship, “depending on whether an exact wording is quoted or an approximate meaning is reported”. The recognized contexts in which projection takes place include comic strips and combination of diagrams and verbal text. Having distinctively introduced the relationship between image and verbiage in terms of logico-semantic and relative status, they combined these two kinds of relation to create more understandable definition for the varieties of image-verbiage relationships appearing in different contexts. The authors thus discuss all possible logico-semantic relations in both equal and unequal status. Likewise, the corpus of the current research will also be analysed in terms of visual and verbal representation; in other words, the researcher deals with participant, process and circumstance that existed in image and language to examine the relationship between them.

Proposing intersemiotic systems concerning “the space of integration between language and image as social semiotic systems” (Unsworth, 2006:60), Unsworth (2006) proposed a theoretical framework for “the dynamics” of language-image interaction in the construction of meaning. Intersemiotic ideational meaning described by Unsworth (2006) takes places as either ideational *concurrence*, *connection* or *complementarity*. He refers to ideational concurrence as “ideational equivalence between image and text” and argues that there are four semantic choices describing ideational concurrence: “redundancy, exposition “where the image and the text are of the same level of generality” (cited from Martinec and Salway, 2005: 350), instantiation where one mode instantiates the other and homospatiality “where two different semiotic modes co-occur

in one spatially bonded homogenous entity” (Unsworth, 2006:61). Ideational complementarity is referred as the case in which what the image of a multimodal text represents is different from what language represents but complement each other and the overall meaning understood by integration of the modes is more than the meaning of each individual mode (ibid). He proposed two types of ideational complementarity including augmentation where each mode extends the meaning of the other and divergence where “ideational content of text and image are opposed” (p.63). The proposed framework for intersemiotic ideational connection consists of either projection (verbal or mental) or conjunction (temporal, causal and spatial).

Relying on Martin’s “appraisal network” (Martin, 2000; Martin and Rose, 2003) which is based on SFL approach towards evaluation, Unsworth (2006) formulates intersemiotic interpersonal meaning made between image and language. “Appraisal network” consists of *attitude, engagement and graduation* (ibid), but Unsworth (2006) delves into *attitude* exclusively. There are subcategories within attitude including *affect, appreciation and judgment*. Citing Martin (2002) that interpersonal meaning between image and language is more about appraisal rather than mood and modality, he claims that images “provoke an evaluative reaction in readers, and they are typically positioned to do this so that they preview or foreshadow the value positions to be constructed in the subsequent verbiage” (p.69). Unsworth (2006) acknowledges earlier studies (Kress and van Leeuwen, 1996; Martin, 2000; Unsworth, 2001; Jewitt, 2002) on theories regarding intersemiotic textual meaning between image and verbiage. All in all, he declares that semantic expansion through these meta-functions takes place simultaneously between image and language in all texts; analytical comprehension of the interpretive potentials of texts thus requires to be on the foundation of integrative perspective of all three meta-functions. Moreover, he believes that the metafunctional system is an accepted approach which can contribute to understand contemporary multimodal texts and develop a valid

and accessible foundation for English language teachers to investigate the pedagogic possibility of metalanguage.

On the basis of Unworth's (2006) ideational Concurrence and Complementarity, Lim (2011) probes into the "co-contextualising" and "re-contextualising" relations of two semiotic resources (language and gesture) through performance of intersemiotic Parallelism and intersemiotic Polysemy. In a study on intersemiosis between gesture and language in pedagogic discourse, Lim (2011) argues that intersemiotic Parallelism and intersemiotic Polysemy can form co-contextualising and re-contextualising relations between semiotic elements of a practice. He states that Co-contextualising leads into "ideational concurrence in the semantic convergence" which fortifies and increases the "emergent meaning" while re-contextualising relations is formed by semantic divergence which results in creation of new semantic layers and it may be make compatible with "ideational Complementarity" in the "emergent meaning" (Lim, 2011: 336).

Intersemiotic cohesive devices are introduced by Liu and O' Halloran (2009) to analyse print media such as advertisements with reference to image and language relation utilizing Halliday's systemic functional grammar. Observing the relationship between image and language through ideational aspect, they propose two types of devices: Logical (*Implication Sequences*) and Experiential (*Correspondence, Antonymy, Hyponymy, Meronymy, Collocation, and Polysemy*). In terms of textual cohesion between visual and linguistic components, four elements are suggested: *Reference, Theme-Rheme Development, Given-New organization, Parallel Structure* (p.371). Referring to Liu and O'Halloran's (2009) four textual cohesive devices, the present study will examine intersemiotic cohesion between image and language of Iranian English textbooks.

To conclude, the previous studies on multimodal discourse have focused on the combination and relation of various range of semiotic resources presented simultaneously for instance, language, image, diagrams, sound, gesture, symbols and etc. As it is inferred from previous papers, cohesion of a text is a crucial element to develop a comprehensible and meaningful text (Castro, 2004; Guo, 2004; Unworth, 2006; Liu and O'Halloran, 2009); however, cohesion of different semiotic resources has yet to get enough attention in multimodal texts. Along with previous researches, the current study concentrates on the cohesion of multimodal pedagogical texts that is Iranian English textbooks, which have image and language as two different semiotic resources.

## **CHAPTER THREE**

### **THEORETICAL FRAMEWORK AND METHODOLOGY**

#### **3.1 Introduction**

This chapter deals with the theories and procedures applied to develop the study. This study examines the verbal and visual modes forming the generic structure of Iranian English textbooks. Another aim of the study is to explore how visual and verbal modes are integrated with each other in a cohesive way. Iranian English textbooks juxtapose language and images to construct meaning and to make multi-semiotic textbooks. Therefore, the analysis of such texts needs to take into account the different semiotic choices in the texts.

The approach which the study relies chiefly on for analysis is Systemic Functional Theory (SFT) as founded by Halliday (1973, 1978, 1994). Systemic Functional Linguistics (SFL) provides the principles to analyse the linguistic components of a text. The principles have been developed to study other semiotic modes in a multimodal text. As such, these principles have been considered as the foundation for analyzing how the various semiotic choices integrate to construct meaning.

The different Sections of the present Chapter provides elaboration of the frameworks and the methods applied to analyse the data. Section 3.2 briefly discusses the three meta-functions of Systemic Functional Linguistics and specifically focuses on the verbal elements that will be examined in the study. Section 3.3 deals with Kress and van Leeuwen' (1996, 2006) visual analysis framework which is grounded on SFL which will be used to analyse visual elements of the data. Section 3.4 is devoted to Liu, Y. and O' Halloran's (2009) framework which introduces inter-semiotic cohesive devices between image and language. The last Section, 3.5 explains the methodology of the

study in terms of data selection and data analysis. Table 3.1 depicts the theoretical frameworks which the present study is using to fulfill the aim of the research.

Table 3.1: Theoretical Frameworks of the Study

Verbal Discourse Analysis	Visual Discourse Analysis	Intersemiotic Cohesion Analysis
Systemic Functional Linguistics (Halliday, 1994, 2004) Transitivity system: <ul style="list-style-type: none"> <li>• Participant</li> <li>• Process</li> </ul>	Visual Grammar (Kress and van Leeuwen, 1996, 2006) Representation: <ul style="list-style-type: none"> <li>• Narrative</li> <li>• Conceptual</li> </ul>	Cohesive Devices (Liu and O'Halloran, 2009) Textual: <ul style="list-style-type: none"> <li>• Reference</li> <li>• Theme-Rheme Development</li> <li>• Given-New Organization</li> <li>• Parallel Structure</li> </ul>

### 3.2 Systemic Functional Linguistics

The study applies the theoretical framework of SFL; as proposed by Halliday (1994), Martin, et al. (1997), Halliday and Matthiessen (2004), Bloor and Bloor (2004) and Eggins (2004) to analyse language. SFL has been expanded to analyse other modes for instance; images, sculptures, music and architecture (van Leeuwen, 1991; Kress and van Leeuwen, 1996, 2006; Baldry and Thibault, 2006; and O' Toole, 2010).

SFL encompasses three meta-functions that manifest the language functions in the system of language: *Interpersonal*, *Textual* and *Ideational* meta-Functions.

Interpersonal metafunction discusses the interactional meaning between participants who have interaction in a speech through “giving or demanding” of information, expressing ideas and goods and services. This meta-function deals with the mood system of the language as an interactive or an exchange occurrence engaging with both the producer of the speech or text and the listener/ reader in a communicative situation.

Halliday (2004) asserts that the producer of the language borrows the speech role of giving or demanding information and appoints the complementary role to the listener or reader while the producer of the language wishes the listener/reader to accept the role.

Halliday (1985, 2004) purports that Ideational meta-function construes the speaker's experience of the world which is inside and around him/her. This meta-function is composed of two constituents which are the logical and experiential meanings.

The logical constituent of ideational meta-function is related to the logical connection between the clauses. Halliday and Hasan (1976) propose that this connection in linguistic components is realised through a variety of linking devices presented by grammar such as ellipsis, conjunction, lexical substitution and reference.

The experiential meaning is constructed where the clause encompasses the processes of being, doing, saying, having or sensing which usually come along with at least one participant. The experiential meaning will be explained in details in Transitivity System in following Section, as this study examines the experiential meaning of the verbal and visual elements in Iranian English textbooks.

The textual metafunction serves to organize the message through the fusion of ideational and interpersonal meanings as well as creating correlation between text and context, in other words, establishing a coherent text. Through the blending of ideational and interpersonal meaning, the difference between text and non-text will be recognizable.

### **3.2.1 Transitivity System**

The framework utilised to investigate verbal configurations and particularly the types of processes presented in the data of this study is transitivity system. Transitivity is regarded as one of the main elements of Systemic Functional Linguistics. Transitivity,



subcategorized in ideational metafunction, is employed in texts to represent our experience of the world within language and magnifies the way in which our mental image of reality is encrypted in it. According to Halliday (2004), “our most powerful impression of experience is that it consists of a flow of events, or ‘goings-on’. This flow of events is chunked into quanta of change by the grammar of the clause”. Halliday and Matthiessen (1999) stated that “the quantum of change is modeled as a figure – a figure of happening, doing, sensing, saying, being or having”. The figures encompass processes displaying within time and participants being the fundamental companion of the processes as well as circumstances of time, space, cause or manner which may be present in the clause to complement the process (ibid). Transitivity is the grammatical system through which such flow of events is reflected. Figure3.1 depicts the elements of the transitivity system.

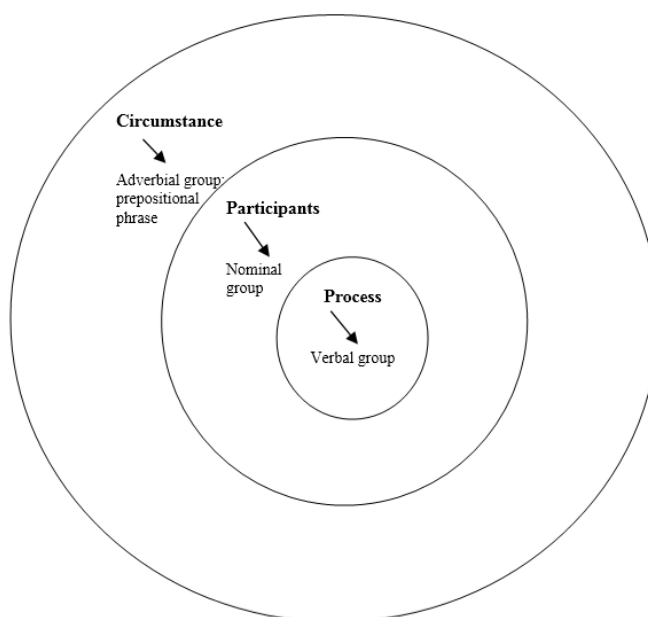


Figure3.1: Central and Peripheral Elements in the Experiential Structure of the Clause (Halliday, 2004)

### 3.2.1.1 Types of processes and participants

The system of transitivity is regarded by Halliday (1994) as a system explicating the world of inner and outer experience into various types of processes. Inner experience is

concerned with consciousness and imagination and outer experience refers to whatever happens around us. The outer experience pertaining to actions and events are materialistic and more concrete and in grammatical clauses are manifested as Material processes. The inner types refer to perception, imagination as well as emotion is sorted in Mental processes. Although there is a rather clear cut edge between inner and outer experiences, the third type of process lies somewhere between the other two categories of experiences – inner and outer – and create relation within pieces of experience. The process signified by such characteristics is called Relational process.

The three above processes – Material, Mental and Relational – in transitivity system are the main processes (Halliday and Matthiensen, 2004:171). The other three subsidiary processes that exist in grammatical system of transitivity fall in the boundaries of the main ones, although they are not clearly distinct but recognizable. These subsidiary processes include Verbal, Existential and Behavioral. Verbal processes sharing the features of Mental and Relational processes, appear in language form to depict symbolic relationships of one's consciousness. Existential processes concerning with the existence, lie on the borderline of Material and Relational. Lastly, Behavioral processes are placed somewhere on the borderline of Mental and Material processes and display the outer expression of what is happening inside.

Table 3.2: Process Types, their meanings and participants adopted from  
Halliday, 1994:143

PROCESS TYPES	CATEGORY MEANING	PARTICIPANTS
Material: action event	‘doing’ ‘doing’ ‘happening’	Actor, Goal
Behavioural	‘behaving’	Behaver
Mental: perception affection cognition desideration	‘sensing’ ‘seeing’ ‘feeling’ ‘thinking’ ‘wanting’	Senser, Phenomenon
Verbal	‘saying’	Sayer, Receiver, Verbiage , Target
Relational: attribution identification	‘being’ ‘attributing’ ‘identifying’	Carrier, Attribute; Token, Value
Existential	‘existing’	Existent

According to Halliday (2004), participants are posited as fundamental constituent of the processes and at least one accompanying participant appears in per clause of experience; however, there exist other types of processes appending up to 3 participants. The types of participants are determined according to the process types. In contrast to the participants, the circumstance is an optional component of a clause. Table 3.2 provides the summary of process categorization and their dependent participants.

### 3.2.1.1.1 Material Process

Material processes are “clauses of doing and happening: a ‘material’ clause construes a quantum of change in the flow of events as taking place through some input of energy” (Halliday and Matthiensen, 2004:179). Material processes interpret the procedure as a flow of tangible and concrete events (ibid). This process displays the outer experience of the world and deals with a participant called Actor. The Actor does the action and causes the changes on some other participants named the Goal (Martinez, 2001). Eggins

(2004:231) believes that Actor pertains to the component in the clause who ‘perform the action’ or ‘does the deed’. Where the material process represents ‘actions’ in the case of intransitive clauses, Actor is the only participant (Halliday and Matthiensen, 2004). Material clauses are entangled with Actors representing “as ‘affecting’ or ‘being done to’ other participants” (Thompson, 2004:79) which is called the Goal and express the fact that the actions of the transitive process are being pointed to it. Besides, in transitive Material processes, second participant may function as scope or beneficiary. However, the scope, unlike the Goal, “is not affected by the performance of the process” (Halliday and Matthiensen, 2004, p.192) which still uncovers the area of the process (ibid). It is supposed that scope, in contrast to Goal, is not explored by asking ‘*do to*’ or ‘*do with*’ but exhibits the domain within which the process has taken place (Martin, Matthiensen and Painter, 1997).

On the other side, Eggins (2004) claims that those types of processes are referred as beneficiary where the second participant of the clause, in some way, receives benefit from the process. The Client, one type of beneficiary, refers to “the one for whom something is done” while the Recipient refers to “the one to whom something is given”. Both, Client and Recipient, might appear with or without the preposition relying upon their place in the clause. A Recipient is expected to accompany the preposition ‘to’ and a Client accompanies the preposition ‘for’.

#### **3.2.1.1.2 Mental process**

Mental process deals with “our experience of the world of our consciousness” (Halliday and Matthiensen, 2004:197) and depicts the actions occurring in human mind. Apparently, these processes are always entangled with a human participant possessing mind for conscious process of the inner feelings or they might be accompanied by animates that reflect some degree of human consciousness. Thompson (1996) refers to

the participants which appear in Mental clauses as the Senser. Accordingly, the senser represents the conscious entity that sees, feels, wants and thinks. Mental process is subcategorized into Perception (sense, see, notice, etc.), Cognition (think, believe, suppose, etc.), Desideration (wish, want, desire, etc.) and Emotion (rejoice, fancy, love, etc.).

One other participant called Phenomenon is also accompanied by Mental process. Phenomenon can be a fact, a thing or an act. Halliday and Matthiensen (2004:210) describe it as something ‘which is felt, perceived, wanted or thought’.

### 3.2.1.1.3 Relational process

The inner and outer experience of the world is displayed by Relational process in the form of being (Halliday and Matthiensen, 2004). The relation represented in Relational process is semiotic rather than material. Therefore, it forms an association between two different entities and also “serves to characterize and to identify” (Halliday and Matthiensen, 2004, p.210). In accordance to Halliday and Matthiensen (2004:214), there exist three different types of relations in English language. The types of relations are categorized in Table 3.3.

Table 3.3: Types of Relational Processes

Halliday, 2004:216

Types	(i) Attributive ‘a is an attribute of x’	(ii) Identifying ‘a is the identity of x’
1) Intensive ‘x is a’	Sarah is wise	Sarah is the leader; the leader is Sarah
2) Possessive ‘x has a’	Peter has a piano	The piano is Peter’s; Peter has the piano
3) Circumstantial ‘x is at a’	The fair is on a Tuesday	Tomorrow is the 10 <sup>th</sup> ; the 10 <sup>th</sup> is tomorrow

Identifying and Attributive relations comprise such relations in a relational clause. These two relations are distinguished by varieties of verbs 'to be' and 'to have' likewise the synonymous verbs such as the verbs 'become' or 'make' (Egins, 2004) in some instances.

There exist two participants in Attributive form representing something that "has some class ascribed or attributed to it" (Halliday and Matthiensen, 2004:219). The participant that is ascribed to some class is known as the Carrier and the other participant is called the Attribute.

In Identifying form, one part "is being used to identify another" or something which "has an identity assigned to it" (Halliday and Matthiensen, 2004:227). Two main participants named Token "which stands for what is being defined" and the Value "that which defines" (Egins, 2004: 285) constitute an Identifying clause.

#### **3.2.1.1.4 Behavioral Process**

Behavioral process possessing no clear-cut construing features shares the characteristics of Mental and Material processes. Thompson purports "they allow us to distinguish between purely mental processes and the outward physical signs of those processes" (1996:100). In other words, Halliday and Matthiesen (2004) claim that Behavioral clauses depict psychological and physiological characteristics. Behavioral process contains one obligatory participant called Behavior that is "typically a conscious being" (Egins, 1994: 250). Yet, there is another participant called Behaviour which takes the role of complement indicating "a restatement of the process" (ibid) and "merely adds specification to the process" (Thompson, 1996: 100).

### **3.2.1.1.5 Verbal Process**

One of the significant processes in English language is Verbal process which shares the characteristics of Mental and Relational processes and is also realized as the process of 'saying'. Verbal processes are the entities which are utilized to convey "messages through language" (Thompson, 2004:100). Four participants involved in such processes are the Sayer, Receiver, Verbiage and Target. The central participant is the Sayer that produces the utterances called the Verbiage. According to Eggins (1994: 252), it is not essential that the Sayer to be a conscious being yet needs to be "capable of putting out a signal". The Receiver being the one to whom the saying is directed" (Halliday and Matthiessen, 2004, p.255) is accompanied by the prepositions *to* and *of* (ibid). The essence of the message followed by a Verbal process is referred as the Verbiage. The Target is the participant "to whom the verbal process is directed" (Eggins, 1994:252) which is in contrast to the Receiver.

### **3.2.1.1.6 Existential Process**

The Existential process expresses an experience in the form of existence. In other words, the existence of a phenomenon is depicted by the Existential process. The main word distinguishing such clauses is 'there' which takes the role of subject in the clause (Eggins, 2004). The Existent following '*there is /are*' is the only compulsory participant in Existential processes and also display a phenomenon. The typical verb used in such processes is the verb '*be*' but other verbs such as '*occur*', '*exist*' and '*arise*' may represent the Existential process.

### **3.2.1.1.7 Circumstantial Elements**

One of the constituent of the system of transitivity is circumstantial elements which occur in prepositional group and adverbial phrases and they are often optional and not

directly involved with any types of process. Circumstances take crucial role in the system of transitivity to “encode the background against which the process takes place” (Thompson, 2004:109). Circumstantial elements are mainly categorized into four groups namely: enhancing, elaborating, projection and extending. The circumstances will not be analysed in this study as the focus is on the processes and participants in the texts.

### 3.3 Visual Analysis

Kress and van Leeuwen (1996, 2006) offered the visual grammar framework derived from Halliday’s metafunctional theory (1994) to analyse visuals although the presented labels are different from Halliday’s.

Table 3.4 manifests the two sets of labels.

Table 3.4:Labels of Visual and Linguistic Metafunctions

Framework	Labels for Metafunctions		
Systemic Functional Linguistics (Halliday, 1994)	Ideational	Interpersonal	Textual
Visual Grammar (Kress and van Leeuwen, 1996; 2006)	Representation	Interaction	Composition

Kress and van Leeuwen (1996, 2006) put the prominence on immediate perception of the visuals to be able to analyse various technical and routine visual texts accompanied by language such as textbooks, advertisements and newspapers which are scanned for meaning (Taib, 2010). Therefore, the framework they developed could be applicable for



investigating illustrations presented in English textbooks. As a result, Kress and van Leeuwen's framework is adopted to explore images in Iranian English textbooks.

Kress and van Leeuwen (1996, 2006) supposed three essential elements to form the visual grammar: representation, interaction and composition. Representation echoes the ideational meta-function, interaction in the visual grammar reflects interpersonal meta-function and textual meta-function is labelled as composition in Kress and van Leeuwen (1996, 2006)'s framework.

### **3.3.1 Representation**

Apart from identifying verbal elements in terms of ideational metafunction, the visual elements of the data will also be analyzed through ideational perspective using Kress and van Leeuwen (2006)'s framework on *representations*. In this framework, the realizations of the represented participants, the processes (doings of participants or happenings) and circumstances in which the activity is being depicted, are considered the key requirements to analyse representational dimension of visual elements (Unsworth and Wheeler, 2002; Unsworth, 2008).

According to Kress and van Leeuwen (1996, 2006:59), ideational meta-function is realised by representation based on the processes involve with the represented participants. People, things and places are identified as represented participants while the processes can be categorized into two groups: *Narrative* and *Conceptual*. The difference between narrative and conceptual can be identified by the existence of a vector which proves the being of narrative process, while the vector in conceptual process is missing. A diagonal line as a vector can be formed by eye lines, limbs, bodies, or tools signifying "is conjoined to", "is related to", or "is connected to" (ibid).

Narrative processes -analogous to the material processes in the system of transitivity- possess participants called “actor” and “goal”. Actor refers to “the participants from whom or which the vector departs and which may be fused with the vector to different degrees” (Kress and van Leeuwen, 2006:59). While the other participant called the “goal” is to whom the vector is pointed. When the two participants are “connected by a vector, represented as doing something to or for each other”, Narrative process is created (ibid).

Narrative process can be realised in many ways based on the types of vector and the kind and number of the participants engaged: *Action process* (A vector which is shaped by either an arrow or illustrated element to relate Actor and Goal), *Reaction process* (the eyeline of the a participant- Reactor- forms the vector, so the other participant is called Phenomenon), *Mental process* (A ‘thought bubble’ forms the vector which connects Sayer and Phenomenon), *Verbal process* (“An arrow-like protrusion of a dialogue balloon”(Kress and van Leeuwen, 2006:75) shapes the vector and connects the Sayer to Utterance), *Conversion process* (A process in which a participant, the Relay, is the Goal of one action and the Actor of another and involves a change of state in the participant (ibid)).

Unlike narrative process, there is no vector determining conceptual process of an image. Conceptual processes depict “participants in terms of class, structure or meaning, in other words in terms of their more generalised and more or less stable and timeless essence” (ibid). The conceptual process is similar to the attributive process of transitivity system of SFL which manifests “process of being” (Halliday, 2004; Kress and van Leeuwen, 2006).

Fundamentally, conceptual process is classified into three types: analytical, classification and symbolical. In *Analytical processes* participants are connected “in

terms of a part-whole structure” (Kress and van Leeuwen, 2006:87). The participant representing the whole is called *Carrier* and other participants which are the parts of the whole and characterize the Carrier are named as *Possessive Attributes* (ibid). Besides that, participants of ***Classificational structure*** are related to each other “in terms of a kind of relation, or a taxonomy” (Kress and van Leeuwen, 2006:79). In such a structure, one participant takes the role of *Superordinate* and the other ones will be *Subordinates* of that participant. In addition, ***Symbolic process*** illustrates the identity of a represented participant being the *Carrier* of the identity which is called *Symbolic Attribute* (Kress and van Leeuwen, 2006). Figure3.2briefly describes the variables of the representation structures in visuals.

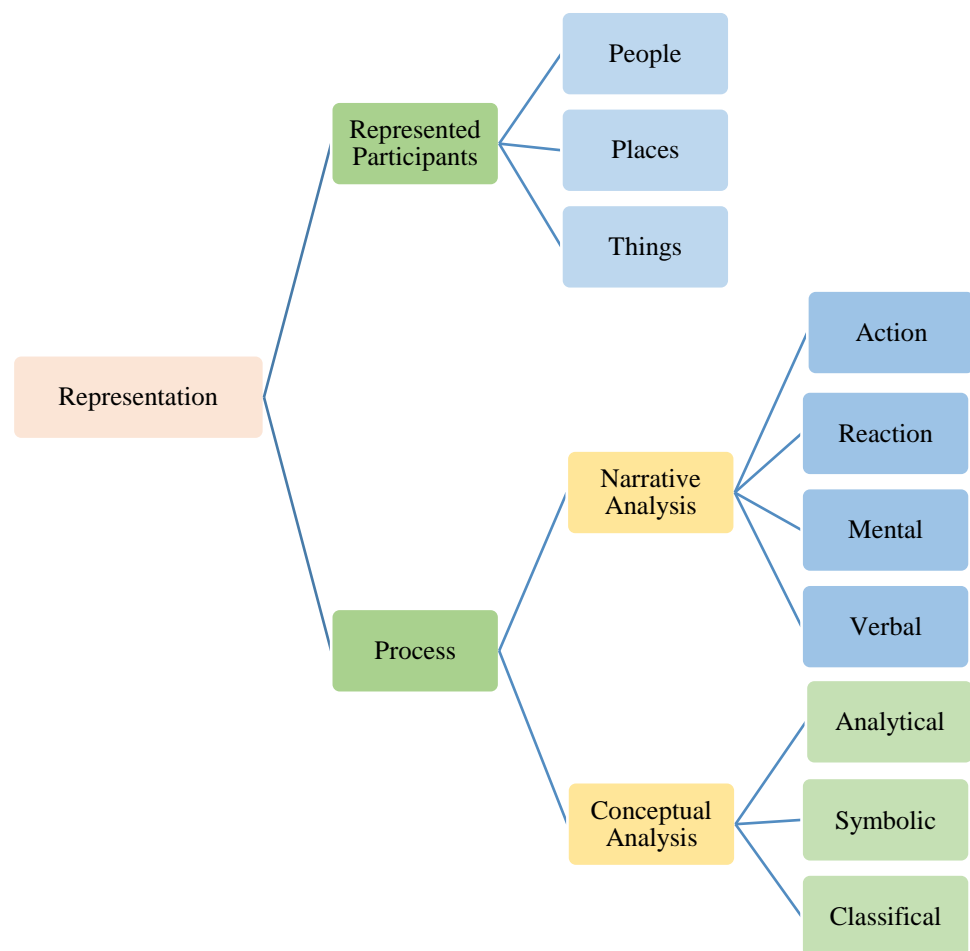


Figure3.2: Variables of Representational Analysis in Visuals

### 3.3.2 Interaction

According to visual grammar of Kress and van Leeuwen (1996; 1999; 2006), Interaction deals with the communication between the viewers or reader and the represented participants of the text. The relationship between them is interpreted through three factors: contact, distance and point of view. The relationship among the participants will be interpreted by **Contact** where the represented participants and the viewers or readers establish a connection via vectors such as gestures and eyelines to endow the meaning of “offer or “demand”. **Social distance** between the viewer and the image is established by the variety of shots: long shot, close-up shot, medium shot and etc. Thus, the distance defines the relations between participants. There remains another element named **Power** playing a significant role in interaction between represented participants and the viewers of advertisements. According to Kress and van Leeuwen (1996, 2006), high and low angle shot can portray the power of the viewer over the represented participants and vice versa. This study, however, does not delve into the interaction between the represented participants and the viewer/reader.

### 3.3.3 Compositional Analysis

In composition analysis, three essential criteria are regarded to construct textual meaning; information value, salience and framing (Kress and van Leeuwen, 1996, 2006). Kress and van Leeuwen refer to information value as the value which is bestowed by the position of elements of an image; in other words, “various zones of the image: left and right, top and bottom” (Kress and van Leeuwen, 2006:177) grants a particular information value. For instance, the information presenting on the left is supposed as the *Given information* while whatever illustrated on the right is understood as the *New information*. The positions of elements in top and bottom also create distinguishing textual meanings. For example, the elements (photos, words, tables)

inserted at the top of the text convey the *Ideal information* to the viewer or reader while what is at the bottom express the *Real information*. Another possibility in arrangement of visual composition is that the *Centre* of the text is considered significant and the element in Centre is manifested “as the nucleus of the information to which all the other elements” around it which “are in some sense subservient” and called *Margins* (Kress and van Leeuwen, 2006:196). Saliency is defined as the elements of the text which are created to be attractive to the viewer’s eyes through their size, position in background or foreground, tonal contrasts. Framing refers to the connectedness or disconnectedness of the elements of the text, expressing whether the elements “belong or do not belong together in some sense” (Kress and van Leeuwen, 2006:177).

### **3.4 Cohesion analysis**

Liu and O’ Halloran (2009) proposed Inter-semiotic Cohesive Devices which stimulate semantic relation and transaction between verbal and visual modalities. These Inter-semiotic Cohesive Devices are introduced “in terms of the Meta functions for meaning construal in discourse stratum” to analyse the inter-semiotic texture of multi-semiotic texts (Liu and O’ Halloran, 2009:370). Liu and O’ Halloran’s framework extracts insights from two approaches: semiotics and SFL, which are driven from prominent models such as Hasan (1985), Royce (1998), Martin (1992) and O’ Halloran (2005) to investigate the semantic interaction between verbal and visual components in printed texts. Liu and O’ Halloran (2009)’s framework focus on the relationship between image and verbal text “in terms of logical, experiential and textual Meta-functions at the discourse stratum”(Liu and O’ Halloran, 2009:371). Besides, Liu and O’ Halloran (2009) purport that this framework scrutinizes the semantic interaction between varieties of semiotic modes from “ranks and levels on the expression plane, the content plane (i.e. grammar and discourse strata) and the context plane (i.e. register and genre)”

(ibid). Table 3.5 presents the summary of the Inter-semiotic Cohesive Devices in multi-semiotic texts as proposed by Liu and O'Halloran (2009).

Table 3.5: Summary of Intersemiotic Cohesive Devices in Multi-semiotic texts

Liu, Y. and O' Halloran (2009):371

Stratum Meta-function		Discourse
Ideational	Logical	Implication Sequence (O' Halloran 2005)
	Experiential	Correspondence (Jones 2007) Antonymy Hyponymy Meronymy Collocation (Royce 1998, see also Inteseimiotic Ideation,O' Halloran 2005) Polysemy
Textual		Reference (see Intersemiotic Identification, O' Halloran 2005) Theme-Rheme Development (see Framing and Salience, Kress and van Leeuwen 2006) Given-New Organization (see Information Value, Kress and van Leeuwen 2006) Parallel Structure

### 3.4.1 Cohesion at Ideational meta-Function

Inter-semiotic ideational meaning between image and language is explored in two categories: logical and experiential meaning (Liu and O' Halloran, 2009). They propose that logical relation between linguistic components and visual ones at discourse stratum can be analysed in terms of ***Implication Sequence*** which encompasses four options: *Comparison*, *Addition*, *Consequence*, and *Time* to categorize the logical meaning between images and verbal mode (ibid). According to Liu and O' Halloran (2009), experiential meaning between different semiotic options can be analysed by cohesive devices such as *Correspondence* which elaborates the relationship between image and language where the meanings created by the visual and verbal elements are same;

“*Antonymy* which displays opposite experiential meaning; *Meronymy* describes the relation between part and whole of something; *Hyponymy* refers to the relation between a general class of something and its subclasses; *Collocation* shows an expectancy or high probability to co-occur in a field or subject area” (Royce, 1998:31), *Polysemy* constructs “co-contextualization meaning between the semiotic choices and “experiential convergence”(Liu and O’ Halloran,2009:375).

However, ideational cohesive devices are not examined in this study as it is confined to the analysis of the textual cohesive devices created between image and language.

### 3.4.2 Cohesion at Textual meta-Function

Liu and O’ Halloran (2009) claim that *Textual cohesion* between images and language can be investigated through the analysis of the textual cohesive devices of *I)Reference* by tracking and identifying participants across visual and verbal blocks; *II)Theme–Rheme development* which realizes the salience of some elements over others by factors such as size, sharpness of focus, tonal contrast, colour contrast, as well as the connectedness and disconnectedness of elements through the absence and presence of framing respectively; *III)Given - New Organization* which identifies the information value of elements through their placement, left and right, up and down or centre and margin; and *IV)Parallel Structure* which realizes the similarity of transitivity configuration across image and language.

The textual cohesive devices introduced by Liu and O’Halloran (2009) are the combination of adopted frameworks of other studies for textual analysis of multimodal texts. *Reference* is a textual cohesive device which is introduced by O’Halloran (2005) under the label of “Intersemiotic Identification” to track participants across various modes such as verbal text, graph and symbols in mathematical texts. Focusing on compositional analysis of multimodal texts, Kress and van Leeuwen (1996, 2006)

proposed “Salience”, “Framing” and “Information Value”. Following Kress and van Leeuwen (1996, 2006), Liu and O’Halloran (2006) refer to the two former terms as **Theme-Rheme Development** and the latter one as **New-Given Organization**.

*Parallel structure* is the only textual cohesive device that is primarily presented in Liu and O’Halloran’s (2009) framework for cohesive devices of image and language in multimodal texts. All the cohesive devices will be explained in the following Sections.

### **3.4.2.1 Reference**

O’Halloran (2005) proposes “Intersemiotic Identification” to explain “System of Reference” across semiotic components of Mathematical discourse. She refers to Reference as a system which deals with tracking and identifying participants across semiotic components. Following O’Halloran’s (2005) intersemiotic identification, Jones (2006) suggests system of reference across image and language in a two-folded system. The first aspect is adopted from Martin’s (1992) perspective which is concerned with the basic reference relation between “presenting” and “presuming” participants. “Presenting” participant is the one which is primarily introduced in texts in one of the semiotic choices and “presuming” is considered as the participant presented in that very semiotic resource or another to refer to “presenting” participant.


The other aspect that Jones (2006) takes into account in Reference system is the relationship between “generic” and “specific” participants. Generic participants of a text refer to the whole class of an experience while the specific ones are the specific examples of that general experience.

According to Jones (2006), image and language, both can be the presenting resources to introduce participants of the text and in turn other resource depicts the presuming participant.



Table 3.6 provides examples of generic/presenting and specific/presuming participants of a dialogue extracted from English textbook 2. The relationship between image and language is shown by arrows that portray cohesive ties across these two semiotic resources. The directions of arrows are based on where the participants are being introduced. Shaded area in the table shows the “generic realization” in the verbal text (Jones, 2006:241).

Table 3.6: Example of Reference System in Iranian English Textbooks

Image	Verbal text	Dialogue
 <p>Boys (generic/presenting) Taxi (specific/presuming)</p>	<p>Hadi/Akbar (specific/presuming)</p> <p>a taxi (generic/presenting)</p>	<p>Akbar: Hi, Hadi. What time is it?</p> <p>Hadi: It's seven thirty. Please hurry up.</p> <p>Akbar: Why?</p> <p>Hadi: It's late.</p> <p>Akbar: Let's take a taxi.</p> <p>Hadi: Ok.</p>

### 3.4.2.2 Theme-Rheme Development and Given-New Organization

As mentioned earlier, Kress and van Leeuwen's (1996, 2006) Salience, Framing and Information Values are introduced by Liu and O'Halloran (2009) under the labels of Theme-Rheme Development and Given-New Organization. These terms have been explained in detail in Section 3.3.3.

Liu and O' Halloran's Theme/ Rheme development and New/ Given organization are in fact other terms for Kress and van Leeuwen's (2006) definition for “layout integration code” of a multimodal text which is concerned with the arrangement of represented

participants in terms of left/right, top/ bottom, foreground or background or how much space of a single page is allocated to them.

According to Arnheim (1988), a strong physiological factor which is based on reader or viewer's emotional sense of balance and weight has an essential role to decipher layout integration code. Referring to Halliday's SFL, Kress and van Leeuwen (2006:201) further propose that "the fundamental function of integration codes such as composition is textual. Integration codes serve to produce text, to place the meaningful elements into the whole, and to provide coherence and ordering among them".

#### **3.4.2.3 Parallel Structure**

Drawing on an insight from Hasan's (1985) model of parallelism for semantic relation of linguistic texts, Liu and O'Halloran (2009) propose that one of the cohesive ties between two semiotic resources such as image and language is ***Intersemiotic Parallel Structure***. They assert that Parallel Structure occurs when language and image as two semiotic modes share analogous "transitivity configuration" which construe our inner and outer experience of the world (Halliday, 2004; Kress and van Leeuwen, 2006).

### **3.5 Methodology**

This Section describes the data and the methodology of analysing the data as carried out by the study.

#### **3.5.1 Data**

The selected data of the study will be English textbooks of Middle school which are titled "Right Path to English" and are designed and prepared in Iran by Iranians who are non-native English speakers. These English books are grammar based where each lesson in the books begins with a dialogue section to introduce the usage of the

grammar structure intended to be learned in that lesson. Each book contains 10 Lessons — except the third book which contains 9 Lessons plus 3 Reviews. All the lessons in the three books (except the first four lessons of Grade 1 which are only concerned with alphabet teaching) commence with a short dialogue. The focus of the study is on the dialogues inserted at the beginning of each lesson. In total, 25 dialogues, that are 6 from Grade 1 book, 10 from Grade 2 and 9 from Grade 3 book, will be analysed. The dialogues are important elements in the lessons because they attract students' attention to the grammatical structures which are taught in these dialogues. These dialogues portray situations, which usually contain images of two people engaging in a conversation, in which the presupposed grammatical structures will be used. A sample of the dialogue is given in Figure 3.3

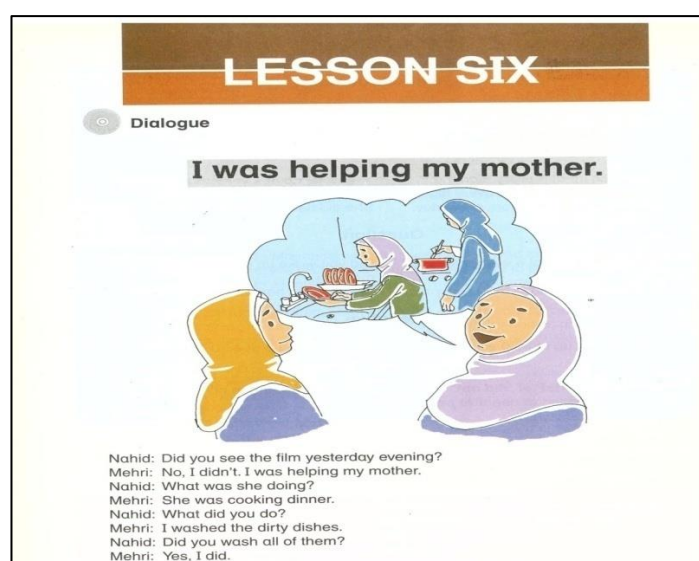


Figure 3.3: A Sample of Dialogue of Iranian English Textbook 3

### 3.5.2 Data analysis

The data analysis starts by identifying the visual and verbal elements in the 25 dialogues to answer research question 1 and 2 and this is then followed by analyzing cohesion between the elements which will provide answer to research question 3. In order to answer the first research question of the study, Kress and van Leeuwen's

(2006) **representation analysis**– explained in section 3.3.1 – is used to identify the visual elements presented in the images of the dialogues in English textbook while Halliday’s (2004) transitivity framework, elaborated in section 3.2.1, is used to analyse linguistic elements in to answer the second question which is aimed at identifying verbal elements of the dialogues. Finally, the present research aims to examine cohesion between the verbal and visual elements of the dialogues using Liu and O’Halloran’s (2009) textual cohesion – explained in detail in section 3.4.2 – in order to answer the research question 3. Table 3.7 provides a summary of analytical frameworks for the three research questions.

Table 3.7: A summary Table for the Analytical Framework

Research Question	Analytical Framework	Elements to be analysed
1. How are the visual elements realised in the dialogue sections found in Iranian English Textbooks?	Representation analysis (Kress and van Leeuwen, 1996, 2006)	visual elements
2. How are the verbal elements realised in the dialogue sections found in Iranian English Textbooks?	Transitivity analysis (Halliday, 2004)	textual elements
3. How do the visual and verbal elements interact with each other to establish cohesion in Iranian English textbooks?	Textual cohesion (Liu and O’Halloran, 2009)	cohesion between visual and textual elements

### 3.5.2.1 Visual Analysis

The visual elements will be extracted from the dialogues and analysed using Kress and van Leeuwen’s (2006) **narrative representation** in terms of *action*, *reaction*, *verbal*, *mental*, *conversion* process and *circumstance* as well as **conceptual representation** in

terms of *analytical* and *Symbolic (Attributive or Suggestive)* processes. The analysis will provide information on what kind of visual elements are used in textbooks. A detailed description of each is in Section 3.3.1.

This study focuses on dialogues of English textbooks which are short conversation between two people who are talking on a topic and as such data do not contain any diagram, tables or any classificational elements. Therefore, the conceptual analysis of the study does not include analysis of classificational structure. The following are examples of visual analysis.

### **Examples of Visual Analysis**

#### **Verbal Process:**

In reference to Figure3.3(page:45), the ‘dialogue balloon’ forms a vector (the arrow) that emanates from the **Sayer**; “*Mehri*”. This is the example of narrative representation in terms of **verbal process** as it shows a participant producing an **Utterance**. **Utterance** may appear in the form of verbal text or image which is embedded in a dialogue balloon. In the given example the utterance is presented in the form of an illustration that visually narrates what the speaker is saying.

#### **Action Process:**

In Figure3.3, there is a participant placed in the dialogue balloon in the background of the image. It is a woman standing in front of a stove and presumably stirring something in the pot. Her hand and the utensil she is holding make up a vector to create interaction between two participants (the woman and the pot). Based on visual transitivity structure, such interaction indicates an **action process** where the woman is **Actor** and the thing is **Goal**. Thus, from the image, it is implied that “*a woman is cooking*”.

### 3.5.2.2 Verbal Analysis

In the verbal analysis, all the sentences will be extracted from the dialogues and analysed based on Halliday (2004)'s *transitivity* analysis where various kinds of *processes* namely Material, Mental, Relational, Verbal, Behavioural and Existential as well as *participants* of processes will be identified. This analysis will provide information on what kind of verbal elements particularly process and participants are used in the books. A detailed description of the various processes and participants is in Section 3.2.1.1. The following provides an example of verbal analysis of the text in Figure3.3(Table 3.8).

#### An Example of Verbal Analysis:

*I washed the dirty dishes.*

Table 3.8: An Example of Verbal Analysis

<i>I</i>	<i>Washed</i>	<i>the dirty dishes</i>
<b>Participant</b>	<b>Process</b>	<b>Participant</b>
<i>Actor</i>	<i>Material</i>	<i>Goal</i>

### 3.5.2.3 Cohesion Analysis

Finally, the cohesion between image and language will be analysed utilizing Liu and O'Halloran's (2009) framework focusing on *textual cohesive Analysis*. The analysis will be on the basis of four textual cohesive devices including *reference*, *theme–rheme development*, *given–new organization*, and *parallel structure*. These devices have been described in Section 3.4.2. The following provide examples of the analysis.

## Examples of Cohesion Analysis

### Example of Reference System:

In the text block of Figure 3.4, speakers' names, *Nahid* and *Mehri*, are identified at the beginning of each utterance. These are common names for females in Iran. The placement of the participants in the foreground of the image provides the evidence that the names in the text refer to these main participants. Therefore, the participants of the image can be tracked in the text (*Nahid* and *Mehri*) by **direct reference**.

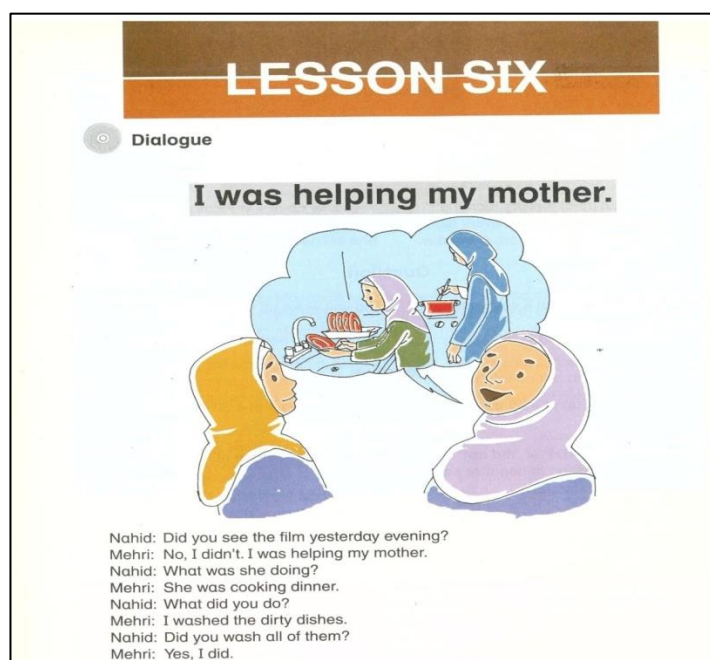


Figure 3.4: Extract from Iranian English Textbook Three

### Example of Parallel Structure:

The verbal element (washed) in the statement “*I washed the dirty dishes*” is classified as a **Material process** which refers to an action. In terms of the visual element in the dialogue balloon, two participants are salient. One is the girl that represents “*Mehri*” and the others are the plates representing “*dirty dishes*”. The girl’s hand and a plate make up a vector to create interaction between the two participants. The visual

transitivity structure established, according to Kress and van Leeuwen, is an **action process** which can be transcoded as “*A girl is washing dishes*”. Based on information from the visual and verbal processes, it can be concluded that both share similar transitivity process and this provides evidence of cohesion in terms of intersemiotic **parallel Structures**. The different types of analyses are summarized in Table 3.9.

Table 3.9: A Summary of Analysis

Type of Analysis	Data to be analysed	Items of Analysis
Verbal	Text in dialogues	Transitivity: Participants, Process
Visuals	Visuals in dialogues	Representation: Narrative Conceptual
Cohesion	Cohesive devices between Verbal and visuals identified in dialogues	Textual devices: reference Theme – Rheme development Given–New organization Parallel Structure

### 3.6 Summary

This study examines intersemiotic textual cohesion between image and language in dialogues of Iranian English textbooks. To fulfil this objective, firstly the verbal elements of the data will be analysed from the ideational aspect using Halliday’s (2004) transitivity system. In the next step, the visual elements of the dialogues will be identified using Kress and van Leeuwen’s (1996, 2006) representation analysis. Finally, intersemiotic textual cohesion between image and language will be investigated using Liu and O’Halloran’s (2009) textual cohesive devices. Therefore, this Chapter has explained the frameworks and the methodology and next Chapter presents the analysis of the study and discusses the findings.



## **CHAPTER FOUR**

### **ANALYSIS AND DISCUSSION**

#### **4.1 Introduction**

This Chapter will discuss the results obtained from the analysis of the dialogues of Iranian English textbooks based on the frameworks explained in Chapter 3. As highlighted in Chapter 1, one of the purposes of the current research is to identify the verbal and visual elements of the dialogues. This research uses Halliday's (1985, 2004) transitivity system to analyse the verbal elements and Kress and van Leeuwen's (1996, 2006) representation framework to analyse the visual components. In the second phase, intersemiotic textual cohesion between image and verbal text of dialogues is investigated based on, Liu and O' Halloran's (2009) framework for textual cohesive devices. The following Sections provide the results that emerged from the analysis of the data, the discussion of the findings and the conclusion of this Chapter.

#### **4.2 Verbal Analysis**

The first phase of the analysis of the study is aimed at identifying the types of processes that exist in the linguistic elements of the dialogue sections in Iranian Middle school English textbooks. The verbal texts in all the dialogue sections of the three English textbooks were analysed using Halliday's (1985, 2004) transitivity system to discover experiential meaning of the texts. Halliday (1985, 2004) introduces six types of processes in the main clauses of a text. These processes encompass Material, Mental, Relational, Behavioural, Verbal and Existential processes. The following are the examples of the analysis.

Example 4.1: Relational process

<b>Sentence</b>	This	is	a table
<b>Analysis</b>	<i>Carrier</i>	<i>Relational</i>	<i>Attribute</i>
	Participant	Process	

Example 4.2: Existential Process

<b>Sentence</b>	There	is	one bus
<b>Analysis</b>		<i>Existential</i>	<i>Existent</i>
		Process	participant

Example 4.3: Mental Process

<b>Sentence</b>	I	don't know	Ahmad
<b>Analysis</b>	<i>Senser</i>	<i>Mental</i>	<i>Phenomenon</i>
	Participant	Process	Participant

Example 4.4: Material Process

<b>Sentence</b>	I	was helping	my Mom
<b>Analysis</b>	<i>Actor</i>	<i>Material</i>	<i>Goal</i>
	Participant	Process	Participant

The following provides the distribution of the different processes across all three English textbooks and discusses the distribution of the process types in the dialogue sections of each textbook based on the English language proficiency level ascribed to the textbooks. The analysis of the dialogues in all three English textbooks reveals that Relational (57%) and Material processes (26%) are the most frequently found processes in the textbooks. Table 4.1 shows the frequency and the percentage of each process.

Table 4.1 Frequency and percentage of verbal processes in the dialogues of the three English textbooks

Process		Book 1	Book 2	Book 3	Total Value in Percentage
<b>Relational</b>	Attributive Relational	100% (n=20)	31% (n=20)	36% (n=25)	42% (n=65)
	Identifying Relational	0% (n=0)	30% (n=19)	6% (n=4)	15% (n=23)
<b>Material</b>		0% (n=0)	28% (n=18)	30% (n=21)	26% (n=39)
<b>Behavioral</b>		0% (n=0)	2% (n=1)	13% (n=9)	6% (n=10)
<b>Existential</b>		0% (n=0)	8% (n=5)	3% (n=2)	5% (n=7)
<b>Mental</b>		0% (n=0)	0% (n=0)	9% (n=6)	4% (n=6)
<b>Verbal</b>		0% (n=0)	2% (n=1)	3% (n=2)	2% (n=3)
<b>Total</b>		13% (n=20)	42% (n=64)	45% (n=69)	100% 153

#### 4.2.1 Verbal Analysis of Textbook One

As shown in Table 1.1, the total processes found in the dialogue sections of English Textbook One are 20. English Textbook One is the first English textbook children are provided with in public schools to learn English language. This textbook is grammar focused and the selected topics are dependent upon the grammar structures intended to be learned. As such, this textbook contains basic grammar structures and simple topics for instance “Are you a student?”, “Is this a desk?”, “I have an umbrella”. English Textbook One is thus restricted to a few structures which are simple and contain a small range of verbs such as “to be” and “have/has” which are the two verbage categories to

distinguish Relational process. As expected, the only process that is found in this textbook is Relational which forms the relationship between two different entities and “serve to characterize and identify” (Halliday 2004, p. 210).

Relational clause is the only process type in Textbook One and it occurred 20 times in the five dialogue sections of English Textbook One and as such indicates 100% occurrence. The following presents examples of this process in English Textbook One.

Example 4.5: Relational Attributive (Attribute)

[I'm a student.]

I	'm	a student
<b>Carrier</b>	<b>Relational Attributive</b>	<b>Attribute</b>

Example 4.6: Relational Attributive (Attribute)

[Is that an orange?]

Is	that	an orange?
<b>Relational Attributive</b>	<b>Carrier</b>	<b>Attribute</b>

Example 4.7: Relational Attributive (Attribute and Possessiveness)

[I have an umbrella, too.]

I	have	an umbrella, too.
<b>Carrier</b>	<b>Relational Attributive</b>	<b>Attribute</b>

As seen in the above examples, clauses in English Textbook One are simple and short and there are only two entities linked in such a Relational process in order to identify attribute or possessiveness in these clauses.

#### 4.2.2 Verbal Analysis of Textbook Two

The total number of processes found in English Textbook Two is 64 which is about three times of Textbook One. As in Textbook One, Relational clauses which encompass 61% of the total clauses in English Textbook Two are also abundant in Textbook Two. In terms of the types of relational process, there are as many Relational Attributive processes as there are Relational Identifying processes in Textbook Two. Unlike textbook One, the other five processes are included in this textbook. Most of the dialogue topics are about introducing oneself, teachers, family, time, and colour which definitely demand usage of easy structures of “to be” or “have/has”. Examples of Relational process -Attributive and Identifying types - in English Textbook Two are presented below:

Example 4.8: Relational Attributive (Attribute)

[What colour **is** it?]

What colour	<b>is</b>	it?
<b>Attribute</b>	<b>Relational Attributive</b>	<b>Carrier</b>

Example 4.9: Relational Identifying (Identity)

[I **am** Hossein Karami.]

I	<b>am</b>	Hossein Karami.
<b>Token</b>	<b>Relational Identifying</b>	<b>Value</b>

Example 4.10: Relational Identifying (Identity and Possessiveness)

[He **is** our teacher.]

He	is	our teacher
<b>Token</b>	<b>Relational Identifying</b>	<b>Value</b>

Example 4.11: Relational Attributive (Attribute and Possessiveness)

[**Have** you a red pencil?]

<b>Have</b>	you	a red pencil?
<b>Relational Attributive</b>	<b>Carrier</b>	<b>Attribute</b>

The second most frequent process found in English Textbook Two is the Material process. Halliday (2004) refers to Material process as the process of ‘doings and happenings’ which manifest “tangible” and “concrete” events. As compared to English textbook one, Textbook Two seems to be a platform to present a wider range of vocabulary and structures in order to let students describe their activities, routines and other situations they are familiar with. Such a fact can be proven by the frequency of Material process (n=18) which shows 28% of total processes of the Textbook Two. Examples of Material process in English Textbook Two are as follows:

Example 4.12: Material Process

-I **walk** to school every day.

-But I **go** by bus.

I	<b>Walk</b>	to school every day.
<b>Actor</b>	<b>Material</b>	Circumstance

I	Go	by bus
Actor	Material	Circumstance

Example 4. 13: Material process

-Do you **study** English every day?

-I **study** English on Sundays and Tuesdays.

Do you	Study	English	every day?
Actor	Material	Goal	Circumstance

I	Study	English	on Sunday and Tuesday
Actor	Material	Goal	Circumstance

Example 4.14:Material Process

-Let's **take** a taxi.

-Ok.

Take	A taxi
Material	Goal

The other processes of Existential (8%), Behavioural (2%) and Verbal (2%) types are seldom found in the dialogues. In addition, there is no Mental process in the dialogue sections of this textbook. Existential clauses which bear the sense of existence are identified in only one of the dialogues in Textbook Two. The number of occurrence of Existential process in this dialogue is 5 as this dialogue presents the structure of “there is/are” in order to teach students how to express existence of something at a particular place. Examples provided below clearly show the pedagogical purpose of this dialogue section.

#### Example 4.15: Existential Process

**-Are there** many cars in the street, Parvin?

-Yes, **there are** many cars in the street.

**-Are there** many buses in the street, too?

-No, **there aren't**.

**-There is** one bus in the street.

<b>Are</b>	<b>there</b>	many cars	in the street?
<b>There</b>	<b>Are</b>	many cars	in the street.
<b>Are</b>	<b>there</b>	many buses	in the street
<b>There</b>	<b>aren't</b>	----	---
<b>There</b>	<b>is</b>	one bus	in the street
<b>Existential</b>		<b>Exitent</b>	Circumstance

Behavioural and Verbal processes were realised only once in all the dialogue sections of Textbook Two. The following examples present the analysis of Behavioural and Verbal processes.

#### Example 4.16: Behavioural Process

-Hello. Is that Ali?

-Yes. Who's **speaking**?

Who	's speaking
Behaver	<b>Behavioural</b>



#### Example 4.17: Verbal Process

-Oh mum's **calling**. Thank you, goodbye.

-Goodbye.

Mum	's calling
Sayer	Verbal

#### 4.2.3 Verbal Analysis of Textbook Three

The dialogues in English Textbook Three included all types of processes. The texts of these dialogues tend to be a bit longer as compared to the texts in the other two textbooks. It seems that English Textbook Three intends to introduce longer and more complicated clauses and this feature detaches it from the textbook used in the basic level and places the Textbook Three in a higher level of English language proficiency. Relational process (42%) is nevertheless the most frequently found as compared to the other processes presented in the dialogue sections of English Textbook Three. The examples provided below show the Relational processes either Attributive or Identifying type which define feelings, characteristics, place and possession found in the textbook.

#### Example 4.18: (a) Relational Identifying

(b) Attributive (Identity, possessiveness and Attribute)

(a)-**Is** it your wallet? (*Expressing identity*)

(b)-No, it isn't. The colour of my wallet **is** brown,  
but this one **is** yellow.

*(Expressing properties and characteristics)*

Is	it	your wallet?
<b>Relational Identifying</b>	Token	Value

The colour of my wallet	is	brown
Carrier	<b>Relational Attributive</b>	Attribute

This one	is	yellow
Carrier	<b>Relational Attributive</b>	Attribute

Example 4.19: Relational Attributive (Attribute and Possessiveness or *Expressing character*)

-What does he **look like**?  
 -He's tall and thin and **has** short black hair.

What	he	(does) look like?
<b>Attribute</b>	<b>Carrier</b>	<b>Relational Attributive</b>
he	's	tall and thin
	And <b>has</b>	short black hair
<b>Carrier</b>	<b>Relational Attributive</b>	<b>Attribute</b>

Example 4.20: Relational Attributive

-That's too bad. (*Expressing feelings*)

That	's	too bad
<b>Carrier</b>	<b>Relational Attributive</b>	<b>Attribute</b>

Example 4.21: Relational Attributive

-Where is Hamid today? (*Expressing place*)

-He's in hospital. (*Expressing place*)

Where	is	Hamid	today?
<b>Attribute</b>	<b>Attributive Relational</b>	<b>Carrier</b>	<b>Circumstance</b>

He	's	in hospital
<b>Carrier</b>	<b>Attributive Relational</b>	<b>Attribute</b>

Material process which is still the second most frequently found process was identified 21 times in the dialogue texts and it shows 30% of the processes in English Textbook Three. Material clauses which convey the meaning of movement and activity in dialogue texts are realised almost as frequent as in the dialogue texts in textbook one. Examples of this process in Textbook Three are as follows:

Example 4.22: Material Process (*Activity*)

-What are you doing, mother?

-I' m cooking lunch.

What	(are) doing	you
<b>Goal</b>	<b>Material</b>	<b>Actor</b>

I	' m cooking	lunch
<b>Actor</b>	<b>Material</b>	<b>Goal</b>

Example 4.23: Material Process (*Activity*)

-Did you see the film yesterday evening?

-No, I didn't. I was helping my mother.

I	was helping	my mother
<b>Actor</b>	<b>Material</b>	<b>Goal</b>

Example 4.24: Material Process (*Movement*)

-Will you go to the country tomorrow?

-No, we'll go next week.

you	(Will) go	to the country tomorrow
<b>Actor</b>	<b>Material</b>	circumstance

We	'll go	next week
<b>Actor</b>	<b>Material</b>	circumstance

Behavioural process occurred 9 times which indicates 13% occurrence of the total types of processes. Examples of Behavioural clauses show that Behavioural processes of the dialogue texts are restricted to only the processes of volitions (e.g. watch, look, talk); however, psychological conditions (e.g. dream, sleep) and physiological behaviours (e.g. smile, cough) are not included in the textbook.

Example 4.25: Behavioural Process (*Expressing Volitions*)

-Do you ever watch TV, Zohreh?

-Yes, I usually watch TV in the evening.

you	(Do) watch	TV?
<b>Behaver</b>	<b>Behavioural</b>	<b>Phenomenon</b>

I	usually	watch	TV	in the evening
<b>Behaver</b>	Circumstance	<b>Behavioural</b>	<b>Phenomenon</b>	Circumstance

Example 4.26: Behavioural Process (*Expressing Volitions*)

-Oh, **look**! There's a wallet on the ground.

Oh,	look
---	<b>Behavioural</b>

Example 4.27: Behavioural Process (*Expressing Volitions*)

-What did you **talk** about?

-We **talked** about many things.

What (about)	you	(did) talk
<b>Phenomenon</b>	<b>Behaver</b>	<b>Behavioural</b>

Mental process was identified in dialogues of English Textbook Three only. According to Halliday (2004), Mental process reflects meaning of emotion (e.g. hate, regret), desideration (e.g. wish, want), perception (e.g. hear, smell) and cognition (e.g. believe, understand). Mental process is distributed 6 times across the dialogues of English Textbook Three and it shows 9% occurrence. Identified Mental clauses disclose the concepts of emotion, perception, cognition and desideration in the textbook.

Example 4.28: Mental Process (*Perception*)

-Did you **see** Peyman yesterday?

-No. I **saw** him this morning.

you	(Did) see	Peyman	yesterday
<b>Senser</b>	<b>Mental</b>	<b>Phenomenon</b>	Circumstance

I	Saw	him	this morning
<b>Senser</b>	<b>Mental</b>	<b>Phenomenon</b>	Circumstance

Example 4.29: Mental Process (*emotion*)

-Did you watch the children's program yesterday?

-Yes, I enjoyed the cartoons very much.

I	<b>Enjoyed</b>	the cartoons	very much
<b>Senser</b>	<b>Mental</b>	<b>Phenomenon</b>	Circumstance

Example 4.30: Mental (*Cognition*)

-Do you know our new teacher?

-No, I don't.

you	(Do) know	our new teacher
<b>Senser</b>	<b>Mental</b>	<b>Phenomenon</b>

Example 4.31: Mental (*desideration*)

All the students like her very much.

All the students	<b>like</b>	her
<b>Senser</b>	<b>Mental</b>	<b>Phenomenon</b>

As Table 4.1 shows, Existential (3%) and Verbal (3%) processes are the least occurring process in the dialogues of this textbook. Examples of Existential and Verbal processes in Textbook Three are provided below.

#### Example 4.31: Existential Process

-Look! **There are** a lot of clouds in the sky.

<b>There</b>	<b>Are</b>	a lot of clouds	in the sky
<b>Existential</b>		<b>Existent</b>	Circumstance

#### Example 4.32: Behavioural Process

-Does she **speak** Persian in the classroom?

-No, she usually **speaks** English.

she	<b>(Does) speak</b>	Persian	in the classroom
<b>Behaver</b>	<b>Behavioural</b>	<b>Phenomenon</b>	Circumstance

She	Usually	<b>speaks</b>	English
<b>Senser</b>	Circumstance	<b>Mental</b>	<b>Phenomenon</b>

#### 4.2.4 Summary of Processes in the Three Textbooks

In a nutshell, evidence of the identified processes in the three textbooks proves the fact that the level of language proficiency needed in using the textbooks gradually increased across the textbooks that is from Textbook One to Three. Concrete and tangible clauses such as Relational and Material are most frequently presented process to interact with beginner English language learners. While Behavioural, Existential, Mental and Verbal processes are introduced only in Textbook Two and Three to broaden and enhance language learner's knowledge in terms of grammatical structure and vocabulary repository and usage of them.

Relational process (65%) is the most favoured process in all the three textbooks and it is concerned with the fact that the dialogues of the three textbooks contain identity, feeling

and time expressions (e.g. “I am Hossein Karami.”; “I am fine”; “it’s seven thirty”) as well as explanation of possession (e.g. “He is our teacher.”) and characters of objects (e.g. “what colour is it?”). All Relational sentences are constructed through making relation between two entities (Halliday, 2004) which are simple and tangible. As it is shown in the examples (4.5-4.11 and 4.18-4.21), the sub-category of Relational Attributive which manifests class membership is presented in all the three English textbooks while the sub-category of Relational Identifying which depicts symbolization (identity) (Martin, Matthiessen and Painter, 1997 cited by Lim, 2011) is presented in the two last English textbooks. Comparing to Relational Identifying, Relational Attributive is presented more in all English textbooks and this may show special tendency towards making relation between two entities which have the same level of abstraction, carrier and attribute, but are different in “generality” (Martin, Matthiessen and Painter, 1997 cited by Lim, 2011).

A great number of relational process in all the textbooks may be related to the fact that relational processes are the most common type in pedagogic texts “since they contribute to scaffolding of comprehending and knowledge construction” (Lim, 2011, p. 302).

Material process (26%) which is the second most frequently found in this study is categorized into the process of “external world” and contributes to students articulating their own concrete experience in simple clauses. In these English textbooks, Material process is related to dynamism and actions indicating routines and experiences of students such as *go, walk, teach, live, give, take* and etc. Indeed, Iranian English textbooks seem to present more “tangible” processes on account of contributing to learners’ understanding of the text (Presnyakova, 2011).

Mental, Behavioural, Existential and Verbal processes are rarely found in all dialogues of the three textbooks. Moreover, Mental sentences are included exclusively in English Textbook Three and it may be caused by the inner nature of Mental process which is far



from concreteness and deals with more abstract matters concerning with cognition (e.g. know), desideration (e.g. like) and perception (e.g. see, feel) (Halliday, 2004).

### **4.3 Visual Analysis**

This Section deals with representational analysis of the visual images in the dialogues of Iranian Middle School English textbooks. The images found in the dialogue sections of the three English textbooks were analysed using Kress and van Leeuwen's (2006) theoretical framework to find out how the represented images convey meanings. Kress and van Leeuwen's (2006) representational framework of the visuals relies on Halliday (2004)'s Transitivity system which analyses representational function of the clauses. As mentioned in Chapter 3, Kress and van Leeuwen (2006) identify two types of representational structure in images, Narrative and Conceptual. The main feature of Narrative process is the presence of vectors which form interaction between participants. In the present study, Narrative process is categorized into different kinds such as Action, Reaction, Verbal, and this study would like to propose a new category which describes the simultaneous occurrence of more than one vector such as eyelines and lines made by limbs in order to realise one single process. With respect to conceptual, this process is identified when there are no vectors present, and it deals with general meanings or timeless and rather constant concepts of images. This process can be further categorized into analytical and symbolical processes to identify general or cultural attributes of the represented participants in the images.

The total number of images in all the three English textbooks is 24. The size of all the images is salient that is they are big in size and as such they play an important role to attract viewers' attention. About 70% (16 out of 24) of the images illustrate the place where the dialogues took place and the rest consist of images of two speakers who are foregrounded with bright color background. All the images, except

one, present the speakers of the story in the texts of the dialogue sections. In addition, 20% (n=5) of the images contain dialogue balloons emanating from the speakers and these balloons contain visual images which either narrate the entire story (Figure4.2) or merely the topic of the story told by the speakers (Figure4.1). The following Section will discuss the findings from the visual analysis.

**Table 4.2** show the frequency of each visual process in the data.

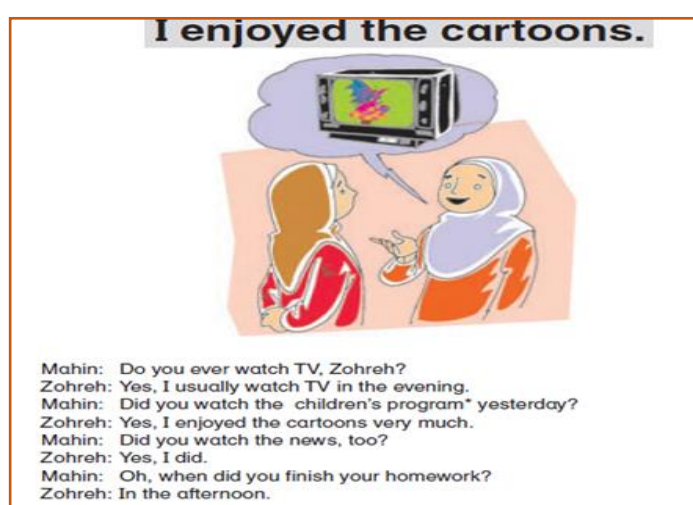


Figure4.1: Extract from Textbook Three

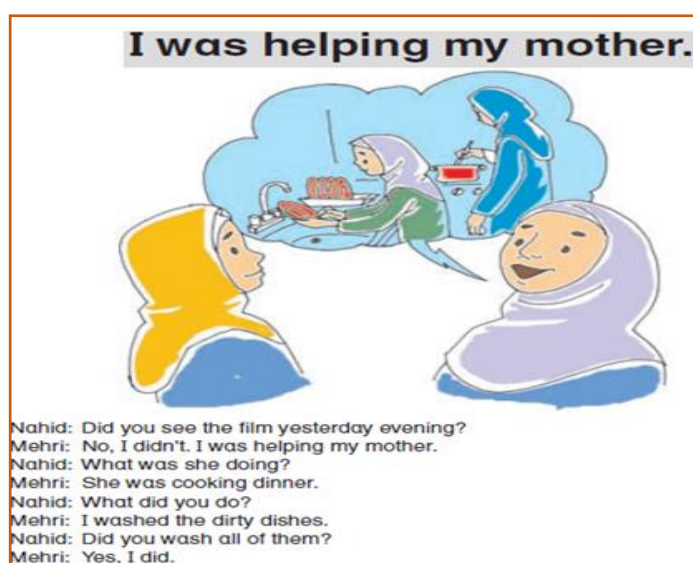


Figure4.2: Extract from Textbook Three

Table 4.2: Frequency and Percentage of Visual Processes in the Dialogues of the  
Three English Textbooks

	Process	Book 1 (n=5)	Book 2 (n=10)	Book 3 (n=9)	Total Value in Percent
<i>Narrative Representation</i>	Action	12% (n=8)	53% (n=36)	35% (n=24)	37% (n=68)
	Reaction	17% (n=6)	16% (n=13)	20% (n=12)	18% (n=31)
	Verbal	22% (n=8)	11% (n=9)	7% (n=4)	12% (n=21)
	Communication (new category)	6% (n=2)	1% (n=1)	13% (n=8)	6% (n=11)
<i>Conceptual Representation</i>	Symbolic Attributive	14% (n=5)	15% (n=12)	11% (n=7)	14% (n=24)
	Analytical	14% (n=5)	12% (n=10)	10% (n=6)	12% (n=21)
	Total	19% (n=34)	46% (n=81)	35% (n=61)	176

### 4.3.1 Narrative Representation

This Section will discuss narrative representation as portrayed by the images in the dialogues based on the types of processes they depict.

#### 4.3.1.1 Action Process

Action process is the most frequently found process (37%) in all the dialogues of the three English textbooks and this is justified as Action process takes the role of expressing experiences exchanged between the speakers of the dialogues; in other words, as displayed in Figure4.3, it illustrates what is going on and what is happening in

the speakers' stories through the vectors created by limbs and objects which portray interaction between participants.

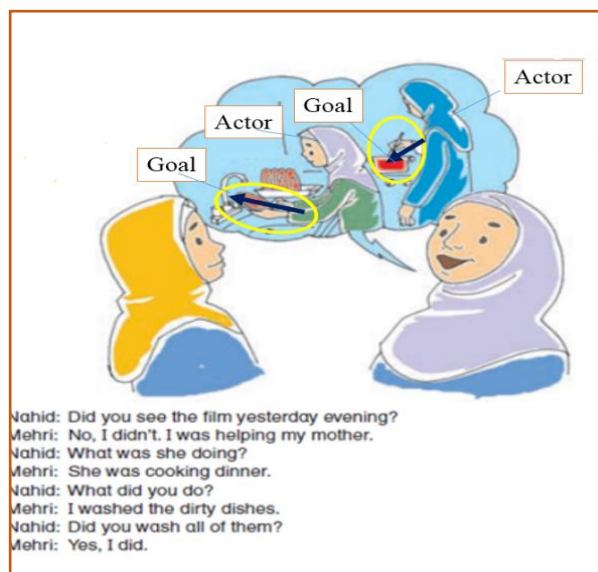


Figure4.3: Extract from Textbook Three

Table 4.2 displays the frequency distribution of Action process across the three textbooks. Action process is found in 12% of the processes in Textbook One, 53% of the processes in Textbook Two and 35% of the processes in Textbook Three. Comparing to Textbook One, there are more Action process in the other two textbooks and it may account for the level of intricacy and the details depicted in the dialogues of the three textbooks. In comparing Textbook One to Textbook Two and Three, Textbook One has structures which are simpler since the verbal texts of its dialogues consist of 4 to 6 easy sentences (as seen Figure4.4) while the dialogues of Textbook Three are extended much longer and the sentences are more complex.

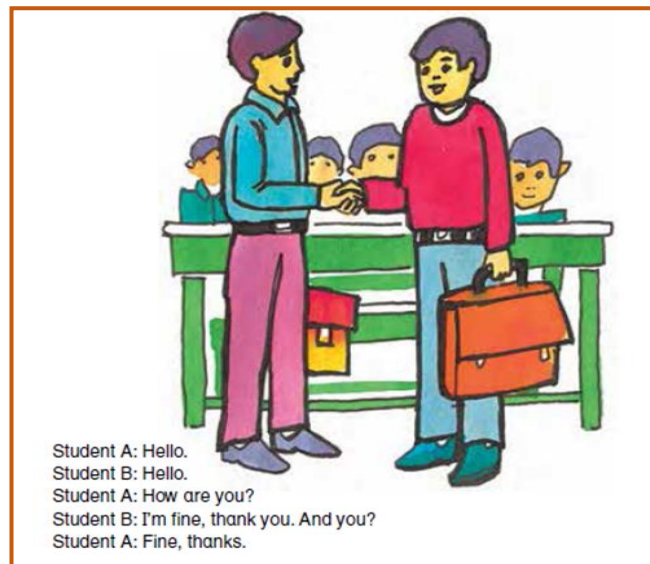


Figure4.4: Extract from English Textbook One

Therefore, the images in the dialogues of Textbook Three need to be illustrated in more detail and greater complexity (Figure4.5).

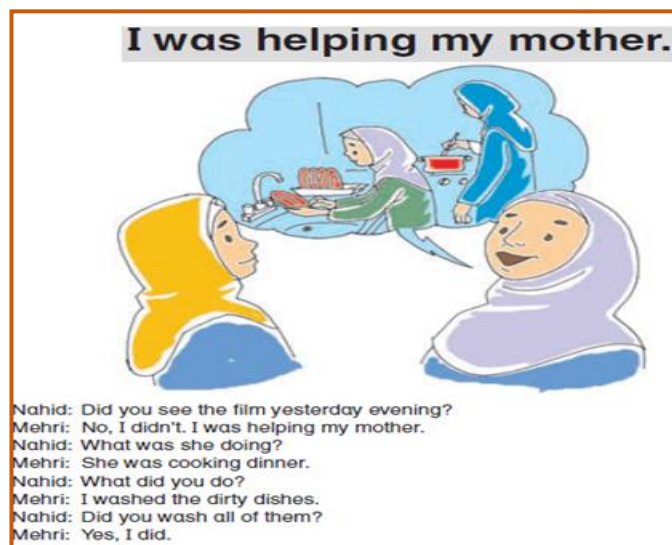


Figure4.5: Extract from Textbook Three

On the other hand, the number of Action process in Textbook Two is greater than in Textbook Three. Textbook Two depicts events in greater detail to enhance students' understanding of the verbal text even though Textbook Three present longer texts.

Action processes are realised either in the dialogue balloons emanating from one of the speakers (Figure4.5) or in the whole image which portrays the event (Figure4.6). For

instance, Figure4.5 illustrates the actions of the participants in the dialogue balloon while in Figure4.6 the whole image serves to depict what the participants are doing.

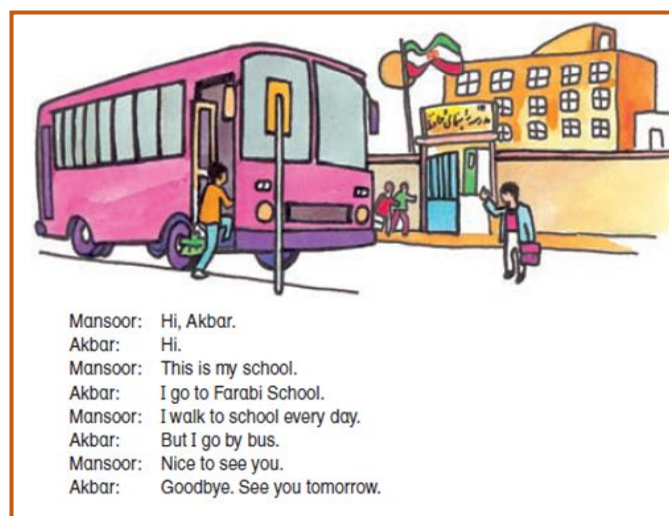


Figure4.6: Extract from Textbook Two

#### 4.3.1.2 Reaction Process

Reaction process is created via the vectors formed by participants' eyelines that is while talking and looking at each other as shown in Figure4.4. This process is not as frequently found compared to narrative action processes. This process is evident 31 times in all the dialogues and this number accounts for 18% of the processes.

#### 4.3.1.3 Verbal Process

Relying on Kress and van Leeuwen's (2006) framework, verbal process refers to "a vector formed by an arrow like protrusion of a dialogue balloon or similar device connecting two participants, a Sayer and an Utterance" (Kress and van Leeuwen, 2006:75). As presented in Figure4.5, Verbal process in the data of the study is realized by the vectors which are formed by the protrusion emanating from the dialogue balloons (Kress and van Leeuwen, 2006). The analysis discovered that Verbal process appears in 12% (n=21) of the total processes and the frequency of Verbal process across all dialogues of the three textbooks is unevenly distributed where in Textbook One, 22%

are verbal process while in Textbook Two, 15% and in Textbook Three, 8% are verbal process.

Visual utterances embedded in the dialogue balloons illustrate either the topic of conversation such as a picture of a TV (Figure4.7) or the narration of the story told by the speakers, for instance, in Figure4.5 the verbal text shows that one of the speakers is explaining how she helped her mother and this event is also illustrated in the dialogue balloon emanating from the speaker. In other words, the image in the dialogue balloon depicts what the speaker said in the verbal mode. Imagery from the utterance may contribute towards a better understanding of actions and happenings described in the narrations since students' level of English language proficiency may hinder understanding of wordy and lengthy texts.

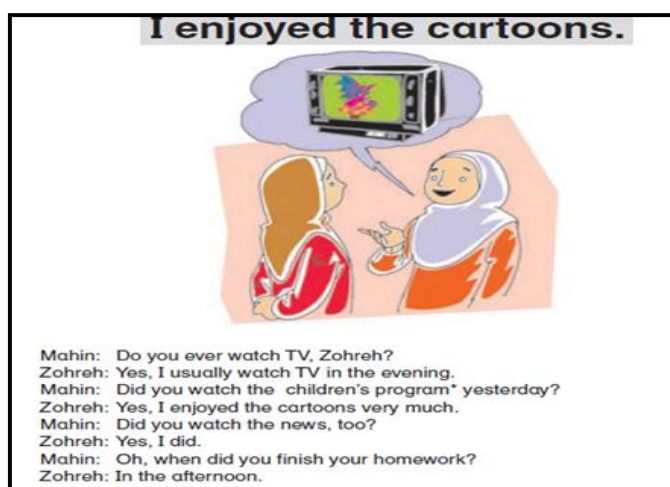


Figure4.7: Extract from English Textbook Three

#### 4.3.1.4 Communication Process

Analysis of the data unfolds a new category for process type where more than one vector is found to portray one process, that is, the process of communication. These vectors are evident when an image depicts two representative participants communicating and speaking with each other. Kress and van Leeuwen (2006) believe that each vector displays only one process; for instance, an imaginary line between the

two participants' eyes (called "eyeline") shows Reaction process and a vector made by limbs or objects depicts Action process. However, this study found that there exists a combination of vectors of Action and Reaction processes in the image showing participants communicating with each other (this is also verified in the discussion with Professor Theo van Leeuwen at the 2013 ALLAP conference organized by University of Malaya). As presented in Figure4.8, these vectors occur simultaneously while two participants are talking where they are both seen making eye contact (reaction vector) and one of the participants gesturing with her hand (action vector) to create interaction with the other participant.

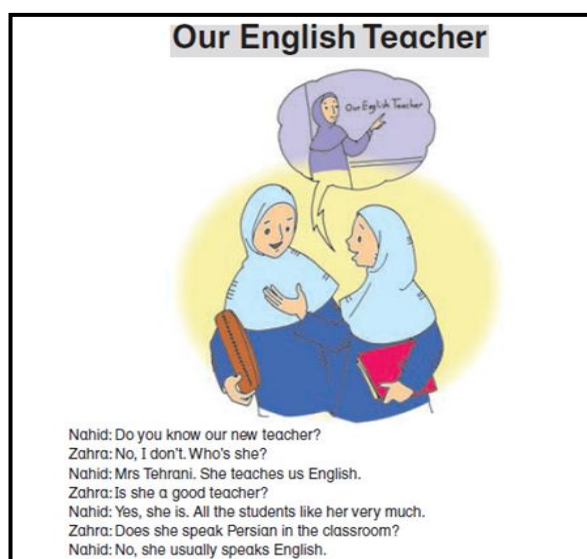


Figure4.8: Extract from Textbook Three

These vectors found in the example of the data contribute towards the act of communicating. The factor which is obvious in this process is the simultaneous presence of these different vectors in order to produce a specific process which this study would like to term it as *communication process*. This communication process is in some way like Halliday's (2004) Behavioural process in the transitivity system which also considers active verbal behaviours in the process. The physical act of opening the mouth to talk, hands gesturing and making eye contact depict the action of making conversation between two participants; in other words, physiological action of speaking



is illustrated in the images. Hence, it can be considered as a dynamic manner of Verbal process. Such process occurred 11 times in the data which manifests 6% in all the processes. In all instances of such process, except one, the participants are the speakers who develop the dialogue.

#### **4.3.2 Conceptual Representation**

Unlike Narrative representation that displays happenings and dynamism, Conceptual representations refer to the processes which carry a general and rather stable essence including social norms, cultures, and general concepts (Kress and van Leeuwen, 2006). Scrutinizing pictures presented in the Iranian English textbooks, evidence shows that the depiction of images are on two basis; culture-religion based and general meaning based. The way human participants are depicted in the images, for instance, females wearing hijab, males with beards and mustache or the way men are dressed carry religious connotation while the architecture and arrangement of buildings, streets, shops, and parks depict cultural elements. On the other hand, there are elements in the pictures delineating general characters of a phenomena which are generally accepted regardless of culture or religion, for example, trees, vehicles, fruits, and television. All pictures were analysed in accordance with conceptual analysis suggested by Kress and van Leeuwen (2006) and two kinds of processes, analytical and symbolic attributive were identified across all three English textbooks. In conceptual representation, Kress and van Leeuwen (2006) consider both human and non-human entity in images as participants.

Analytical process makes up 12% of the all processes in the data. This process deals with the generic interpretation of the participants of the image; in other words, the attributes of the participants in the image allow viewers to immediately know what the

entity is, for example, in Figure4.9 viewers will know that the background of the image is that of a park which contains trees and a bench on which the boys are sitting.

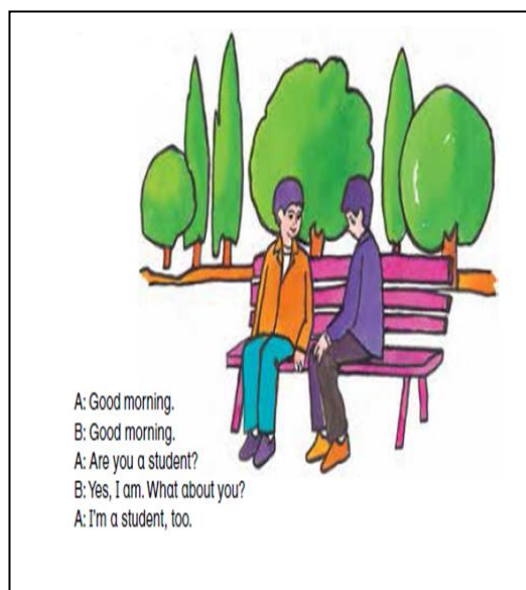


Figure4.9: Extract from Textbook One

Kress and Jewitt (2003) claim that semiotic modes are the essence of the cultural practices in turning substances into resources to represent. As a result, creation of resources leads into “regularities” formed by “conventions” which is understood by the people following a culture and also it is applicable by them for communication and representation.

A great number of participants of the images convey meanings derived from notions and stereotypes of Iranian society. For example in Figure4.10 depictions of female students wearing hijab, long dress and pants are categorized into Symbolic Attribute process which aims to manifest cultural and religious beliefs of a society.

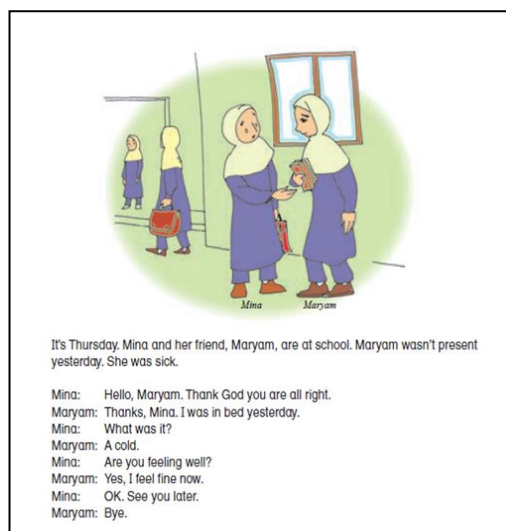


Figure4.10: Extract from Textbook Two

Symbolic Attribute process occurred 24 times in all dialogues and it represents 14% of the total processes.

Robertson (2008) suggests that being familiar with the characteristics of each semiotic resource and knowledge about the limitation of any culture contribute to individuals to pick the proper semiotic resources to convey a message since within each mode, channel and layout of the message carries cultural and social connotations; hence, it definitely affects the comprehension of the message. Therefore, it can be claimed that presence of cultural connotations in images of the dialogues enable Iranian students to better understand the verbal texts which is in a foreign language since they are familiar with such concepts and can grasp the meaning more easily.

#### 4.4 Intersemiotic Textual Cohesion Analysis

The study has investigated images and texts of dialogue sections of the Iranian English textbooks from the ideational perspective to understand how visual and verbal components independently structure experiences existing in the English textbooks. Next the study will explore how these two semiotic modes integrate cohesively to realise the experiences.

According to Kress and Jewitt (2003), the fusion of modes contributes to the whole message. They believe that meaning inferred from a message is conveyed by the relevant semiotic resources.

Section 4.4 will discuss intersemiotic textual cohesion devices between image and language in the dialogues of Iranian English textbooks used in middle school. Textual cohesion between image and language was analysed based on cohesive devices proposed by Liu and O' Halloran (2009). The cohesive devices give an insight to how different elements of a text come together to build a cohesive text in order to be differentiated from a non-text (Halliday and Hasan, 1976).

Intersemiotic textual cohesive devices suggested by Liu and O' Halloran (2009) include reference, theme-rheme development, given-new organization, and parallel structure. How each of these intersemiotic textual cohesive devices is realised in the text will be discussed in the following subsections.

#### **4.4.1 Reference**

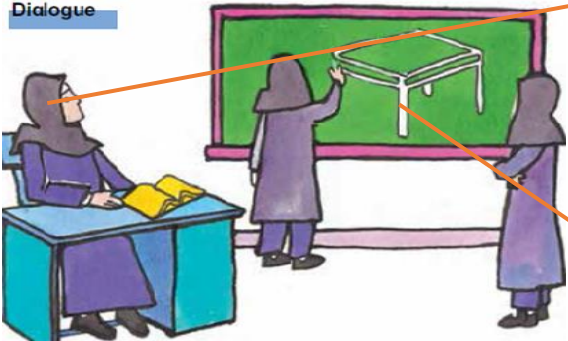
The system of Reference through semiotic choices is discussed by O' Halloran (2005) under the label of “*intersemiotic identification*” and according to her, Reference is concerned with how identifying relationship is established across semiotic components or within a semiotic resource of a text. Relying on O' Halloran's (2005) intersemiotic identification, Jones (2006) proposes intersemiotic identification in a two-folded system. One is in line with Martin's (1992) perspective stating that basic relation in a reference system is between “*presenting*” participants and “*presuming*” participants and the other system is the relationship between “*generic*” and “*specific*” reference which cross-classifies the former system. In accordance with Jones (2006), the generic reference refers to the whole class of an experience while the specific reference refers to an example of that experiential class. In this study, identifying relations between visual

and verbal texts of dialogues have been explored based on Jones's (2006) perspective in order to find cross references between image and text of the data.

Therefore, this study will show which semiotic resource (image or verbal text) introduces participants of dialogues; in other words, in which semiotic resource the participants are "presenting". The semiotic resource which introduces a participant may either be through the image or verbal text; in other words, a participant may be presented in the verbal text and presumed in image and vice versa. The direction of arrows illustrated in the extracts indicates in which resource a participant is introduced and the shaded elements refer to generic realizations in image and verbal text of dialogues. It is found that images in the dialogues of all three textbooks primarily carry a general perception of the illustrated participants whereas the verbal text of dialogues present details of the representative participants such as their names and careers.

With reference to Table 4.3, "teacher" is introduced in verbal text as a general class of the entity and therefore this is considered as presenting/generic. On the other hand, the image illustrates a classroom with a teacher at a desk, who is reintroduced as a specific example in the image and thus this is presuming/specific. Table 4.3 exemplifies this analysis.


Table 4.3: Extract from Textbook One

Image	Verbal text	Dialogue text
 <p>(specific/presuming)</p>	<p>X teacher</p> <p>a table</p> <p>(generic/presenting)</p>	<p>Teacher: Is this a desk?</p> <p>Mina: No it isn't.</p> <p>Teacher: What is it?</p> <p>Mina: It is a table.</p>

From Table 4.3, “a table” in the sentence: “it is a table.” is “generic/ presenting” and the picture of table illustrated in the image is a specific example of the class of tables. Therefore, “table” in the verbal text of the dialogue is “generic/presenting” while the illustrated table is “specific/presuming”.

There are cases that image appears as “generic/presenting” and the verbal text as “specific/ presuming”. As shown in Table 4.4, the main foregrounded participants of the image can be recognized as two female students while the identity of these girls cannot be identified since the presented image is a drawing which is abstracted from our everyday perception and are not real characters, so it is still in the domain of generic (Thibault, 2001; Jones, 2006).

Table 4.4: Extract from Textbook Three

Image	Verbal elements	Dialogue Text
 <p>(generic/presenting)</p>	<p>Mrs. Tehrani</p> <p>Nahid</p> <p>Zahra</p> <p>(specific/presuming)</p>	<p>Nahid: Do you know our new teacher?</p> <p>Zahra: No, I don't. Who's she?</p> <p>Nahid: Mrs Tehrani. She teaches us English.</p> <p>Zahra: Is she a good teacher?</p> <p>Nahid: Yes she is. All the students like her very much.</p> <p>Zahra: Does she speak Persian in the classroom?</p> <p>Nahid: No, she usually speaks English.</p>

In the dialogue text of Table 4.4, “Zahra” and “Nahid” are proper names which are presumed to refer to the two salient foregrounded participants in the image. In this case, “the verbal text abstracts the specificity from images and construe visuals as generic” (Jones, 2006, p.242) since it reveals the names of participants in the image: “Nahid” and “Zahra” that is categorized as “specific/presuming”. In this image, there is another participant in the dialogue balloon that represents an Iranian female teacher, based on the symbolic attributes of the image, e.g. wearing hijab and long dress. The teacher in the image performs as “presenting and generic” item since it depicts a general idea of an Iranian teacher while the identity of the teacher including her name (Mrs. Tehrani) is explicitly mentioned in verbal text. Therefore, in this case, it shows that the image becomes “generic/presenting” and verbal text is “specific/presuming”.

The following Sections will discuss in detail the Theme-Rheme development and Given/ New organization as textual cohesive devices in the dialogues of English textbooks.

#### **4.4.2 Theme-Rheme development**

Liu and O'Halloran (2009) define Theme-Rheme development in textual cohesion in relation to Kress and van Leeuwen's (2006) "Salience" and "Framing" in spatial composition of a text. Salience is defined as the elements of the text which are easily attracted to the viewer's eyes through their size, position in background or foreground, tonal and colour contrasts and sharpness of focus. Framing refers to the connectedness or disconnectedness of the elements of the text, expressing whether the elements "belong or do not belong together in some sense" (Kress and van Leeuwen, 2006, p.177).

The study found that all images in data as compared to verbal texts, are much more salient in terms of size as well as the space that is allocated to them on a single page. Furthermore, images are all coloured and this fact intensifies the significance of these pictures to easily attract viewer's attention. Kress and van Leeuwen (1996, 2006) claim that salience may have the link with size, overlapping, and colour of semiotic components and thus with the level of importance. As inferred from the analysis of the current study, the images of the dialogues are more salient than verbal texts in size and the amount of space they are given but such salience is not compatible with the level of importance of images. The salience of the semiotic components in terms of their size may depend upon the importance within the hierarchy of each semiotic component in the whole text, but not always (Jones, 2006). In this study, although verbal texts of dialogues are not salient they may be considered more important in some ways since all grammatical points which are new to the students (e.g. new structures, new vocabularies) are introduced in verbiage while the images may take the role of '*Enhancing*' (Nikolajeva and Scott, 2000:225), where one mode expands the meaning transferred by another to contribute to students' understanding of the verbal texts.



In spite of the fact that images are salient in the dialogues, foregrounded participants presented in images are not very distinguishable from the background as they are illustrated in monochrome. Fine details are not provided as the images lack colour contrast. Therefore, it eliminates reality from the images.

According to Halliday (2004), if a clause is considered as a message, the “point of departure of the message” which is the “psychological Subject” of a clause is called “Theme” and the rest is “Rheme”; in other words, whatever comes first in a clause is regarded as “Theme”. Following Systemic Functional approach to linguistic message composition, semiotic elements which primarily attract viewers’ attention due to their salience in size and placement (which elements come at top of the page or are foregrounded) are referred to as “Theme” by Liu and O Halloran (2009) and other semiotic elements of a multimodal text are regarded as “Rheme”.

Images of the dialogues can be hence identified as Theme on the account of their salience in size and space they are allotted and verbal texts can take the role of Rheme for they may not be the first component to attract viewers’ attention due to the small font of verbal text.

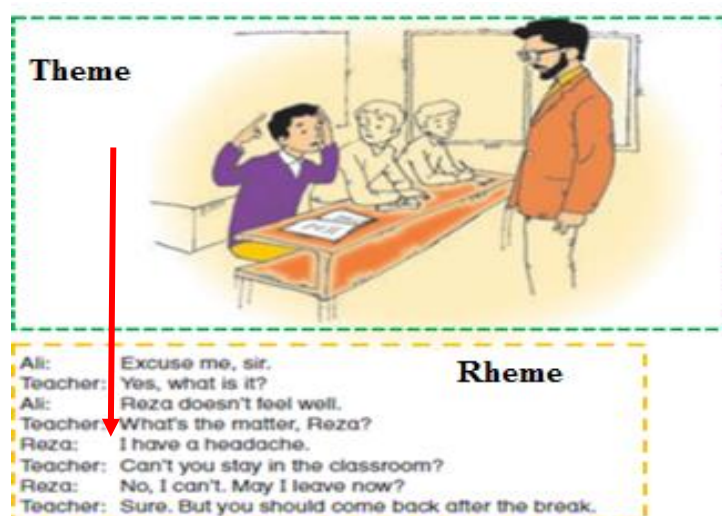


Figure4.11: Extract from Textbook Three

Nearly all images and verbal texts of dialogues are arranged in a vertical pattern from top to bottom (refer to Figure4.11), in other words, images are placed on top and verbal texts immediately come after the image at bottom of the page. Yet there are a few dialogues which deviate from top-bottom pattern and are in left-right arrangement. Dialogues in Iranian English textbooks are designed to be read in a linear way either from top to bottom or left to right (Kress and van Leeuwen, 2006) like how Western texts should be read.

Images in the vertically patterned dialogues can be regarded as “theme” since they are salient and placed at the top of the page and hence can be regarded as the “point of departure of the message” for readers or viewers. Verbal texts in this study can be considered as “Rheme” because they come after the images and are the “remainder of the message” (Halliday, 2004, p.64). Only two dialogues are in left-right pattern as shown in Figure4.12.

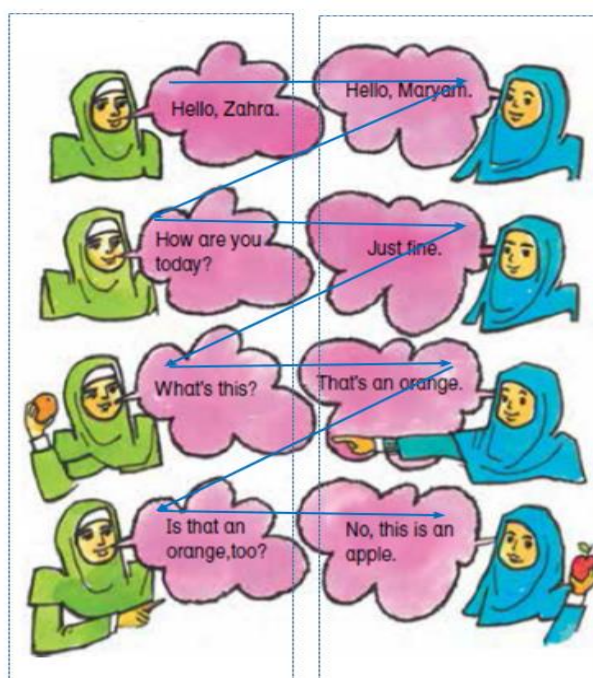


Figure4.12: Extract from Textbook One

They are designed in a way that the text is a part of the image since it is inserted in a dialogue balloon and the sequence of utterances is in top to bottom arrangement. In such dialogues “the point of departure of the message” or “theme” in each row is on the left and “rheme” is on the right (ibid). Moreover, in terms of framing, verbal and visual components of these dialogues are found more connected than other dialogues in the textbooks as the verbal texts are placed in dialogue balloons and they can be considered as parts of the image; therefore, a stronger unity can be found in these two dialogues since the verbal texts are integrated in visual part and it creates cohesion between image and text (Kress and van Leeuwen, 2006). In comparison with the other dialogues, the elements of these two dialogues are more integrated. However, the participants (who are the speakers of the dialogues) of these dialogues and their utterances are still disconnected by spatial framing and as such there exists discontinuity between participants. This is likely to be the designers of the textbook preference for such presentation to make identification of the speakers easier. Jewitt (2003, 2010) takes into account spatial framing as a source of meaning making in a multimodal text and she thus proposes that the space block between participants of the image suggests the degree of “the closeness and status of relationship between characters” (2010: 88). In the analysis of this research, there is no evidence to support Jewitt’s (2003, 2010) suggestion in terms of the relationship between spatial framing and participants’ relationship and it is likely the continuity and discontinuity of the elements in all dialogues of these textbooks arise from the textbook designers’ preference rather than meaning making criteria.

In all top-bottom patterned dialogues like in Figure4.11, verbal texts are neatly disconnected from images through the space between image and text and in some cases through contrast of colours in the background of image and text. According to Kress and van Leeuwen (2006), the less the elements of a text are connected the more they are

isolated; therefore, the orientation of some of the images and texts in dialogues of the textbooks removes the unity of the whole text and makes it less cohesive.

#### 4.4.3 Given-New Organization

According to Liu and O'Halloran's (2009) framework, Given-New Organization is what Kress and van Leeuwen refer to as "Information value". Kress and van Leeuwen (2006) define information value as the value which is given by the position of elements of an image; in other words, "various zones of the image: left and right, top and bottom" grants a particular information value (Kress and van Leeuwen, 2006, p.177).

As discussed earlier, the images in the dialogues are depictions of Iranian everyday concepts as they illustrate general essence of a phenomena or "something the reader is assumed to know already as a part of the culture" (Kress and van Leeuwen, 2006, p. 180) while verbal texts elaborate details of either participants or the story exchanged between the two speakers in the dialogues. Referring to Figure 4.13, Analytical and Symbolic Attributive analysis of the image reveal the role of participants.

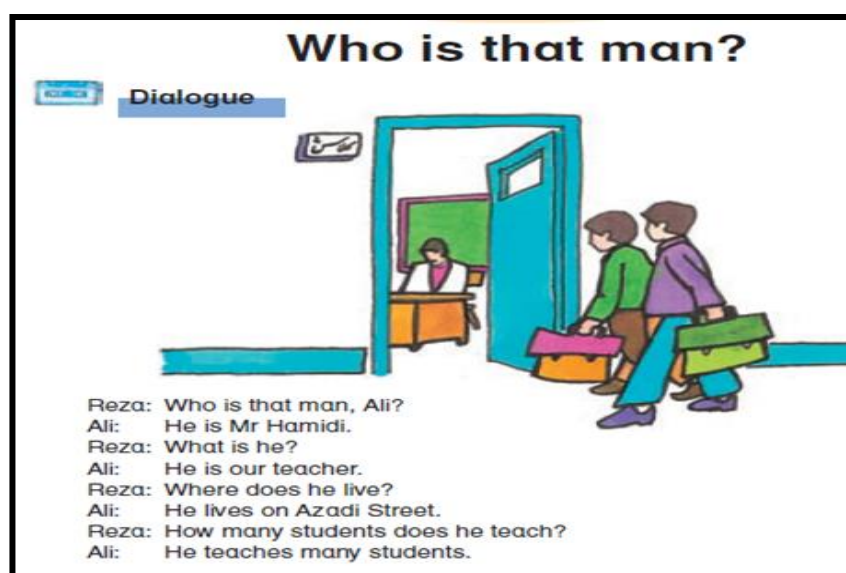


Figure 4.13: Extract from Textbook Two

For example, the room with a label next to the door, the blackboard and the desk inside the room represent a typical classroom in Iran. Likewise, the appearance of the boys carrying school bags symbolizes Iranian students and also the man in a formal suit who is sitting at the desk in the classroom portrays an Iranian teacher. Such illustration provides general information which is known to any Iranian viewer. On the other hand, the text discloses more details about the presented teacher in the image such as his name, the place he lives, whose teacher he is and how many students he has. Hence, the image presents Given information while the text represents New information.

As mentioned earlier, layout orientation of image and verbal text in nearly all dialogues does not follow left-right/Given-New information but top-bottom arrangement. In other words, images that are placed on top may portray the knowledge already known to target viewers/readers and bear Given information while verbal texts reveal New information about the speakers of the dialogues such as their identity as well as other details. Therefore, the images in the dialogues can be categorized as Given information while verbal texts as New even though they are in the top/bottom arrangement and not in the left/right dimension which is usually the case for given/new. This means that the top now represents given information while bottom, the new information.

#### **4.4.4 Parallel Structure**

Inspired by Hasan's (1985) study on parallelism in linguistic texture, Liu and O'Halloran (2009) propose that Intersemiotic Parallelism is concerned with the cohesive relation between image and language that '*interconnects*' these two semiotic resources when they "share a similar form" (p. 372). They argue that this kind of cohesive relations might be effective as Parallel Structures at discourse level. According to Liu and O'Halloran (2009), Intersemiotic Parallel Structures take place where language and image as two semiotic resources share analogous "transitivity

configuration” (p. 373) which construe our inner and outer experience of the world (Halliday, 2004; Kress and van Leeuwen, 2006). According to Lim (2011), Liu and O’Halloran’s (2009) intersemiotic Parallelism is in correspondence with Unsworth’s (2006) Ideational Concurrence which refers to “ideational equivalence between image and text” (p. 60). Lim (2011) who works on the semantic relationship between language and gesture claims that intersemiotic Parallelism appears where there is co-contextualization between two semiotic modes “to achieve Ideational Concurrence in the semantic convergence” and this increases the meaning rising out of the “combinational deployment”.

Kress and van Leeuwen (2006) also suggest that visual processes can be transcoded in language processes although there is “no one to one correspondence” between structures of two semiotic modes (p.76). For instance, Visual Unidirectional Transactional Action process is similar to linguistic Material process which represents the experience of Actor on Goal. On the basis of previous studies (Kress and van Leeuwen, 2006; Liu and O’Halloran, 2009; Lim, 2011), the current research takes similar approach towards the analysis of Parallelism between language and image to show how two parallel structures existed in two different semiotic resources make semantic convergence and thus result in cohesive texts.

Representation analysis of verbal and visual elements in the dialogues which are presented in Sections 4.1 and 4.2 can be used to see the Parallelism between image and language of the data.

The following provides examples of Parallel Structures between image and verbal text in the dialogues.

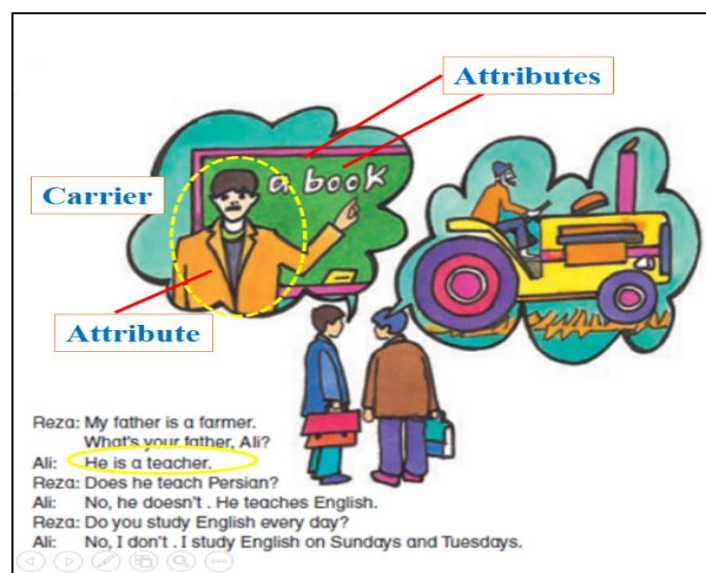


Figure4.14: Extract from Textbook Two

Table 4.5: Verbal process of Figure 4.14

Participant	Process	Participant
He	is	a teacher
My father	is	a farmer
<b>Carrier</b>	<b>Relational</b>	<b>Attribute</b>
He	teaches	English
<b>Actor</b>	<b>Material</b>	<b>Goal</b>

As Figure4.14 reveals, the dialogue balloons are more salient in terms of “volume” (O’ Toole, 1994).The dialogue balloon on the left illustrates a man posing in front of the blackboard and pointing to the English words written on the board. He has a strong eye contact with the viewers of the image. Moreover, frontal angle and medium shot minimize the social distance between viewer and represented participant, therefore their involvement is increased. Through the Symbolic attributes of the participant, it can be understood that the illustrated man is an Iranian English teacher where the man with moustache is Carrier while formal suit he is wearing and blackboard are Symbolic attributes. This visual Symbolic

Attributive analysis can be transcoded to the Relational clause of SFL: ***“He is a teacher”*** in the verbal text of the dialogue (Table 4.5).

Besides, it can be easily interpreted from the image that the man is teaching English. His left hand makes a diagonal line which creates a vector towards the board. This vector indicates a strong interaction between the man and the board as well as “a sense of dynamism” (Liu and O’ Halloran, 2009, p.373). The visual action process indicates that the man is Actor and English words are Goal. Thus, this Action process can be in convergence with Material process in SFL: ***“He teaches English”*** in the verbal text where “He” is Actor and “English” is Goal.

The dialogue balloon on the right illustrates a man riding a tractor. Although the man on the tractor does not have eye contact with the viewers, the tractor which manifests the identity of the man creates a strong gaze to viewers through its wheels. In addition, colour contrast in this balloon magnifies the salience of the presented participants (Kress and van Leeuwen, 2006). Based on Symbolic Attributive process, the man symbolizing a farmer, is Carrier while the tractor and his urban clothes are Possessive Attributes. This visual process converges with Relational clause in SFL: ***“My father is a farmer”*** in the verbal text where “My father” is Carrier and “a farmer” is Attribute.

There is not always complete parallelism between the two modes, yet some of the structures of the image are partially parallel with the verbal structures. In other words, the images in the dialogues do not portray exactly whatever is presented in verbal texts but the visual processes in the images depict participants in a way which can be related with the processes presented in the verbal texts. For instance, as displayed in Figure4.15, there is a taxi whose front lights are facing the boys and this creates vectors which display an interaction between the boys and the taxi where the boys would be the Reactors and taxi is the Phenomenon in a Reaction process. Moreover, the road makes a



diagonal line which can be considered as a vector to show an Action process which portrays the taxi is being driven on the road. Here, the taxi is Actor in such Action process. On the other hand, the clause: *“Let’s take a taxi”* which is produced by ‘Akbar’ is classified as Material process in SFL where “a taxi” is Goal and ‘Akbar and his friend’ is Actor. In fact, the image does not show that the taxi is taken by the boys but from the presence of a taxi near the boys in the image can be implied that there is a relationship between the boys and the taxi which are the Actors and Goal of the Material process of the verbal text. There may still be a partial parallelism between Reaction process in the image and Material process in verbal text and the processes can be parallel in some way. The verbal and visual analysis of Figure4.15 is summarized in

Table 4.6.

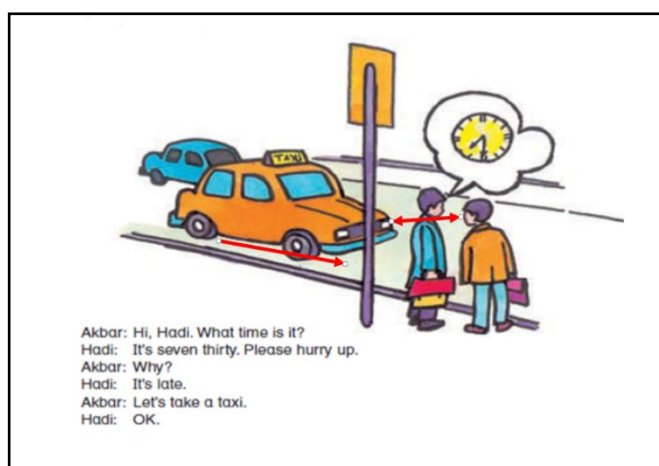


Figure4.15: Extract from textbook Two



Table 4.6: Verbal and Visual processes of the Extract

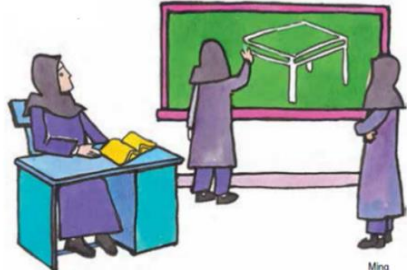
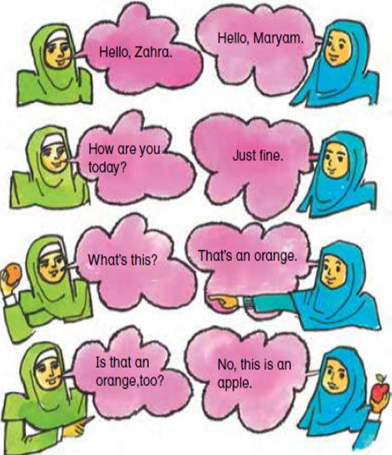
Semiotic mode	Participant	Process	Participant
Verbal text	Let's (Let us)	take	a taxi
	Actor	Material	Goal
Image	The boys		taxi
	Reactor	Reaction	Goal



#### **4.4.5 Summary of Intersemiotic Textual Cohesion Analysis**



Table 4.7 summarize the way intersemiotic textual cohesive devices are applied in putting together the dialogues in Iranian English textbooks. Based on the table, the participants presented in the images and the verbal texts can be introduced in either image or verbal text. However, in most of the dialogues, image is the source of “generic/presenting” participants. The table also show that all the images of the dialogues are the salient semiotic elements of the whole text. Moreover, it shows that except for two dialogues, the visual and verbal elements of all the other dialogues are disconnected. In terms of information value, the images of all the dialogues play the role of Given information while the verbal texts present New information. As it is shown in the Table 4.7, the semiotic components of all dialogues are sometimes not parallel or are in partial parallelism. If there is parallelism, the visual and verbal structures of the dialogues are found to be parallel in one or two processes. In the end, it cannot be claimed that the dialogues are perfectly intersemiotically cohesive since the image and the verbal text of each dialogue are not integrated by all the identified cohesive devices. If they are integrated, it is through one or two of the devices only.



Table 4.7: Summary of IntersemioticTextual Cohesion Analysis



N O.	Cohesive Devices  Dialogues	Reference	Theme-Rheme development		Given-New organization	Parallel structure
			Salience	Framing		
1	 <p>Student A: Hello. Student B: Hello. Student A: How are you? Student B: I'm fine, thank you. And you? Student A: Fine, thanks.</p>	<p>Verbal text: generic/presenting Image: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given Text: New</p>	<p>Partially parallel in one process of imageand verbal text:</p> <p>shaking hands: Action process “How are you”: Relational process</p>
2	 <p>A: Good morning. B: Good morning. A: Are you a student? B: Yes, I am. What about you? A: I'm a student, too.</p>	<p>Verbal text: generic/presenting Image: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given Text: New</p>	No parallelism

3	 <p>Teacher: Is this a desk? Mina: No, it isn't. Teacher: What is it? Mina: It's a table.</p>	<p>Verbal text: generic/presenting</p> <p>Some parts of Image: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Parallelism in one process of image and verbal text:</p> <p>Drawing on the board: Analytical process “It’s a table”: Attributive relational process</p>
4		<p>Some parts of Verbal text: generic/presenting</p> <p>Some parts of Image: specific/presuming</p> <p>Some parts of Verbal text: specific/presuming</p> <p>Some parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Connected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Parallelism in two process of image and verbal text:</p> <p>1.Round orange object in the girl’s hand: Analytical process “That’s an orange”: Attributive relational process</p> <p>2. Round red object in the girl’s hand: Analytical process “his is an apple”: Attributive Relational process</p>

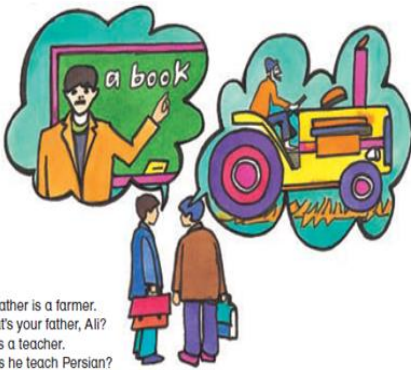

5	 <p>Parvin: Good afternoon. Maryam: Good afternoon. How are you? Parvin: Very well, thank you. And you? Maryam: Fine, thanks. I have an umbrella. What about you? Parvin: I have an umbrella, too.</p>	<p>Some parts of Verbal text: generic/presenting</p> <p>Some parts of Image: specific/presuming</p> <p>Some parts of Verbal text: specific/presuming</p> <p>Some parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Connected visual and verbal elements	Image: Given Text: New	<p>Parallelism in two process of image and verbal text:</p> <p>1.an umbrella in a student's hand: Analytical process "I have an umbrella": Attributive Relational process</p> <p>2. An umbrella in other student's hand: Analytical process "I have an umbrella, too":Attributive Relational process</p>
6	 <p>Amin: Hello, Ali. How are you today? Ali: Just fine. Thank you. Amin: How is school? Ali: It is OK. Amin: Have you English today? Ali: Yes, we have. What about you? Amin: No, we haven't.</p>	<p>Image: generic/presenting</p> <p>Verbal text: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	Image: Given Text: New	No parallelism



7	 <p>Parvin: Excuse me. Have you a red pencil?  Mehri: No, I haven't.  Parvin: Have you a pen?  Mehri: Yes, I have.  Parvin: What colour is it?  Mehri: It's red. Here you are.  Parvin: Thank you.</p>	<p>Image: generic/presenting</p> <p>Verbal text: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Parallelism in one process of image and verbal text:</p> <p>A black pencil in the student's hand: Analytical process  "I haven't" [a red pencil]: Possessive Relational process</p>
8	 <p>Hamid : Are there many cars in the street, Parvin?  Parvin : Yes, there are many cars in the street.  Hamid : Are there many buses in the street, too?  Parvin : No, there aren't.  There is one bus in the street.</p>	<p>Some parts of Verbal text: generic/presenting</p> <p>Some parts of Image: specific/presuming</p> <p>Some parts of Verbal text: specific/presuming</p> <p>Some parts of Image: generic/presenting (Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Parallelism in two processes of image and verbal text</p> <p>1.A yellow bus in the picture: Analytical process  "there is one bus in the street": Existential process</p> <p>2. A pink car in the image: Analytical process  "There are many cars in the street": Existential process</p>



9	 <p>A: Hello, I am Hossein Karami. What's your name? B: My name is Nasser Omid. A: Is that your car? B: No, it isn't. A: Whose car is it? B: It's Ali's. He is my brother.</p>	<p>Some parts of Verbal text: generic/presenting</p> <p>Some parts of Image: specific/presuming</p> <p>Some parts of Verbal text: specific/presuming</p> <p>Some parts of Image: generic/presenting (Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	Image: Given Text: New	<p>Partial parallelism in one process of image and verbal text</p> <p>Man 's hand pointing to the car while looking to the other man: Action and Reaction processes "Is that your car": Possessive Relational process</p>
10	 <p>Hi, Hadi. Hello, Amir. Have you a watch? Yes, I have. What time is it, please? It's about 8 o'clock.</p>	<p>Some parts of Verbal text: generic/presenting</p> <p>Some parts of Image: specific/presuming</p> <p>Some parts of Verbal text: specific/presuming</p> <p>Some parts of Image: generic/presenting (Refer to Appendix C)</p>	Salient picture	Connected visual and verbal elements	Image: Given Text: New	<p>1.parallelism in one process of image and verbal texts</p> <p>2.Partial parallel in another process of image and verbal texts</p> <p>1.The boy has a black watch on his wrist: Analytical process "Have you a watch?": Possessive relational process</p> <p>2.The boy is looking at his watch and saying something: Reaction process and verbal process "It's about 8 o' clock.": Relational process</p>



11	 <p>Akbar: Hi, Hadi. What time is it? Hadi: It's seven thirty. Please hurry up. Akbar: Why? Hadi: It's late. Akbar: Let's take a taxi. Hadi: OK.</p>	<p>Some parts of Verbal text: generic/presenting</p> <p>Some parts of Image: specific/presuming</p> <p>Some parts of Verbal text: specific/presuming</p> <p>Some parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	Image: Given Text: New	<p>1.parallelism in one process of image and verbal texts</p> <p>2.Partial parallelism in another process of image and verbal texts</p> <p>1.The clock in the balloon: Analytical process "It's seven thirty.": Attributive relational process</p> <p>2. Front lights of the taxi and the boys: Reaction process "Let's take a taxi": Material process</p>
12	 <p>Mansoor: Hi, Akbar. Akbar: Hi. Mansoor: This is my school. Akbar: I go to Farabi School. Mansoor: I walk to school every day. Akbar: But I go by bus. Mansoor: Nice to see you. Akbar: Goodbye. See you tomorrow.</p>	<p>One part of Verbal text: generic/presenting</p> <p>One part of image: specific/presuming</p> <p>other parts of Verbal text: specific/presuming</p> <p>other parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	Image: Given Text: New	<p>Parallelism in two processes of image and verbal texts</p> <p>1.The boy is getting up the bus: Action process "I go by bus": Material process</p> <p>2.The boy is walking across the street: Action process "I walk to school every day": Material process</p>

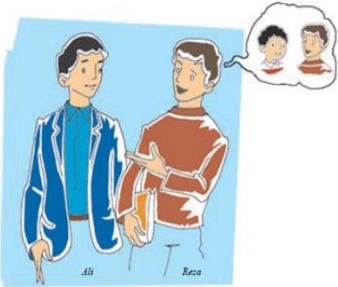





13	 <p>Reza: My father is a farmer. What's your father, Ali? Ali: He is a teacher. Reza: Does he teach Persian? Ali: No, he doesn't. He teaches English. Reza: Do you study English every day? Ali: No, I don't. I study English on Sundays and Tuesdays.</p>	<p>Some parts of Verbal text: generic/presenting</p> <p>Some parts of Image: specific/presuming</p> <p>Some parts of Verbal text: specific/presuming</p> <p>Some parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	Image: Given Text: New	<p>Parallelism in three processes of image and verbal texts</p> <p>1.The teacher in the image: Symbolic attributive process “He is a teacher”: Relational process</p> <p>2. The tractor driver in the image: Symbolic attributive process “My father is a farmer”: Relational process</p> <p>3. The teacher is pointing to an English word on the board: Action process “He teaches English”: Material process</p>
14	 <p>Reza: Who is that man, Ali? Ali: He is Mr Hamidi. Reza: What is he? Ali: He is our teacher. Reza: Where does he live? Ali: He lives on Azadi Street. Reza: How many students does he teach? Ali: He teaches many students.</p>	<p>Image: generic/presenting</p> <p>Verbal text: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	Image: Given Text: New	<p>Parallelism in one process of image and verbal text</p> <p>The teacher in the classroom: Symbolic attributive process “He is our teacher”: Relational process</p>


15	 <p>Ali: Hello. Reza: Hello. Is that Ali? Ali: Yes. Who's speaking? Reza: This is Reza. Ali: Hello, Reza. What are you doing? Reza: I'm studying. Ali: English or Persian? Reza: English. Ali: Do you study English every day? Reza: No, not every day. But I'm practicing it now. Ali: Oh, "mum's calling. Thank you, goodbye." Reza: Goodbye.</p> <p><i>Ali is talking to Reza.</i></p>	<p>Image: generic/presenting</p> <p>Verbal text: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Partial parallelism in one process of image and verbal text</p> <p>The boys are speaking on the phone: Action process</p> <p>“Who’s speaking?”: Behavioural process</p>
16	 <p><i>Mina Maryam</i></p> <p>It's Thursday. Mina and her friend, Maryam, are at school. Maryam wasn't present yesterday. She was sick.</p> <p>Mina: Hello, Maryam. Thank God you are all right. Maryam: Thanks, Mina. I was in bed yesterday. Mina: What was it? Maryam: A cold. Mina: Are you feeling well? Maryam: Yes, I feel fine now. Mina: OK. See you later. Maryam: Bye.</p>	<p>One part of Verbal text: generic/presenting</p> <p>One part of image: specific/presuming</p> <p>Other parts of Verbal text: specific/presuming</p> <p>Other parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>parallelism in two processes of image and verbal text</p> <p>1.the girls with school uniforms and bags: Symbolic attributive process</p> <p>“Mina and her friend, Maryam, are at school”: Relational process</p> <p>2. dropped eyelids, downward eyebrows and rather bending knees of the girl: Analytical process</p> <p>“She was sick”: Relational process</p>

17	 <p>Amir : Oh, look! There's a wallet on the ground. Is it your wallet?  Ali: No, it isn't. The colour of my wallet is brown, but this one is yellow.  Amir : Perhaps it's Ahmad's. He is there at the bus stop.  Ali: I don't know Ahmad. What does he look like?  Amir : He's tall and thin and has short black hair.</p>	<p>One part of Verbal text: generic/presenting</p> <p>One part of image: specific/presuming</p> <p>other parts of Verbal text: specific/presuming</p> <p>other parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Parallelism in two processes of image and verbal text</p> <p>1. something yellow on the ground: analytical process “there is a wallet on the ground.”: Existential process</p> <p>2. the boy in the image: Analytical process “He’s tall and thin and has short black hair.”: Relational process</p>
18	 <p>Nahid: Do you know our new teacher?  Zahra: No, I don't. Who's she?  Nahid: Mrs Tehrani. She teaches us English.  Zahra: Is she a good teacher?  Nahid: Yes, she is. All the students like her very much.  Zahra: Does she speak Persian in the classroom?  Nahid: No, she usually speaks English.</p>	<p>Image: generic/presenting</p> <p>Verbal text: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Parallelism in one process of image and verbal text</p> <p>Teacher is pointing to the board: Action process “She teaches us English”: Material process</p>

19	 <p>- What are you doing, mother?  - I'm cooking lunch. We have some guests today.  - How many guests do we have?  - Five. Your uncle and his family.  - Can I help you?  - Yes, get me some rice.  - Where is it?  - In the closet.  - How much do you need?  - About two kilos.  - All right.</p>	<p>Image: generic/presenting</p> <p>Verbal text: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Parallelism in one process of image and verbal text</p> <p>the girl's arms as well as the pot are pointed to the woman's hands: Action process  "get me some rice": Material process</p>
20	 <p>Mahin: Do you ever watch TV, Zohreh?  Zohreh: Yes, I usually watch TV in the evening.  Mahin: Did you watch the children's program* yesterday?  Zohreh: Yes, I enjoyed the cartoons very much.  Mahin: Did you watch the news, too?  Zohreh: Yes, I did.  Mahin: Oh, when did you finish your homework?  Zohreh: In the afternoon.</p>	<p>One part of Verbal text: generic/presenting</p> <p>One part of image: specific/presuming</p> <p>other parts of Verbal text: specific/presuming</p> <p>other parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	No parallelism

21	 <p>Ali: Hello, Reza. How are you today?  Reza: Not too bad.  Ali: Did you see Peyman yesterday?  Reza: No, I saw him this morning.  Ali: What did you talk about?  Reza: We talked about many things.  Ali: Is he in your class?  Reza: No, he is in grade two.</p>	<p>Image: generic/presenting</p> <p>Verbal text: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Parallelism in two processes of image and verbal text</p> <p>1. the boys in the balloon look at each other: Reaction process</p> <p>“I saw him this morning”: Mental process</p> <p>2. the two boys are looking at each other and talking: Communication process</p> <p>“We talked about many things”: Behavioural process</p>
22	 <p>Nahid: Did you see the film yesterday evening?  Mehri: No, I didn't. I was helping my mother.  Nahid: What was she doing?  Mehri: She was cooking dinner.  Nahid: What did you do?  Mehri: I washed the dirty dishes.  Nahid: Did you wash all of them?  Mehri: Yes, I did.</p>	<p>Image: generic/presenting</p> <p>Verbal text: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>Parallelism in two processes of image and verbal text</p> <p>1. The girl in the balloon is washing the plates: Action process</p> <p>“I washed the dirty dishes”: Material process</p> <p>2. the woman is cooking: Action process</p> <p>“She was cooking dinner”: Material process</p>

23	 <p>Ali: Excuse me, sir. Teacher: Yes, what is it? Ali: Reza doesn't feel well. Teacher: What's the matter, Reza? Reza: I have a headache. Teacher: Can't you stay in the classroom? Reza: No, I can't. May I leave now? Teacher: Sure. But you should come back after the break.</p>	<p>One part of Verbal text: generic/presenting</p> <p>One part of image: specific/presuming</p> <p>other parts of Verbal text: specific/presuming</p> <p>other parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	Image: Given Text: New	No parallelism
24	 <p>A: Where is Hamid today? B: He's in hospital. A: Why? B: He had a car accident yesterday. A: That's too bad. Is he a careless driver? B: No, he usually drives carefully. A: Was he driving carelessly yesterday? B: Yes, he was driving fast.</p>	<p>One part of image: generic/presenting One part of verbal text: specific/presuming</p> <p>Other parts of verbal text: generic/presenting other parts of image: specific/presuming</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	Image: Given Text: New	<p>Parallelism in two processes of image and verbal text</p> <p>1. The man in the bed: Symbolic attributive process. "He is in hospital": Relational process</p> <p>2. car crash: Analytical process "He had a car accident yesterday": Possessive attributive process</p>

25	 <p>Amir: Look! There are a lot of clouds in the sky.  Mehdi: Oh, yes. It may rain tonight.  Amir: Will you go to the country tomorrow?  Mehdi: No, we'll go next week.  Amir: Why do you often go to the country?  Mehdi: We have a lot of relatives there.  Amir: Good luck. Have a good time.  Mehdi: Thanks. See you later.</p>	<p>One part of Verbal text: generic/presenting</p> <p>One part of image: specific/presuming</p> <p>other parts of Verbal text: specific/presuming</p> <p>other parts of Image: generic/presenting</p> <p>(Refer to Appendix C)</p>	Salient picture	Disconnected visual and verbal elements	<p>Image: Given</p> <p>Text: New</p>	<p>parallelism in one process of image and verbal text</p> <p>The curved lines are symbolized as clouds in drawings: Symbolic attributive process</p> <p>“There are a lot of clouds in the sky”: Existential process</p>
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#### **4.5 Conclusion**

The findings of the verbal analysis shows that Relational process structures of the attributive and identifying types outnumber other processes in all the dialogues of English textbooks. It seems that all the three English textbooks favor the relational clauses or sentences. The second frequently found process is Material process present in short sentences. Such evidence proves that the language of these series of textbooks are very simple and tangible to enable students whose English proficiency is low in order to comprehend the text. Moreover, the sequence of occurrence of the different processes across all three English textbooks reflects the increasing level of complexity and abstractness in the textbooks. For instance, Mental process is presented in English Textbook Three only since it express more abstract experiences while Textbook One and Two do not have any Mental process structure in the clauses of the dialogues as the dialogues in these textbooks are catered for the beginners thus only concrete structures are used.

The visual analysis of the current study indicates that most of the images in the dialogues are narrative which is in line with Guijarro and Sanz's (2008) findings. Nevertheless, Narrative action processes are found to occur more frequently in images of the dialogues which is in contrast to Guijarro and Sanz's (2008) findings where they found the predominance of reaction process instead in their analysis of images. It may arise from the fact that images of the dialogues of the textbooks serve to narratively illustrate actions and doings of represented participants in order to create crystal clear details from experiences exchanged between speakers of dialogues. This is to compensate for the low English language proficiency of Iranian students. Wordy verbal texts in these English textbooks can impede students understanding of the text. Reaction process which depicts eye contact between participants of the images is the second frequent process. In this study, verbal process is also evident in the form of a dialogue



balloon emanating from a participant. The analysis of this research indicates that most of the utterances of the visual Verbal processes are visually illustrated rather than being presented in linguistic texts. However, Mental process is not observed in the dialogues of the study since Mental process occurs where there is a thought bubble that illustrates about whatever the participant is thinking. But the data of this study includes the dialogues which contain only dialogue balloons.

Apart from the types of narrative processes discussed, a new narrative category called Communication process is introduced in this study. Communication process which is realised by simultaneous occurrence of more than one vectors illustrates the act of communicating. This process occurs in the data when there is evidence of the participants communicating with each other in the images. The images of the dialogues are also investigated in terms of conceptual representation. It is found that represented concepts of the images can be classified into cultural and religious categories which are presented by symbolic attributes like the hijab as well as general category like furniture which is independent of cultures, society and religion. However, there is no evident of classification structures in the images of the dialogues as there are no flowcharts, taxonomies, or any kind of diagrams in data. Diagrams are not typical in language texts especially when dealing with grammar structures such as in the data of the study.

The last phase of the analysis of the data is devoted to intersemiotic textual cohesion analysis through identifying four cohesive devices including Reference, Theme-Rheme development, Given-New organization and Parallel structure.

Based on the analysis of the data, some of the participants are presented both in the verbal texts and the images of the dialogues. Moreover, participants may be introduced in the images and reintroduced in the verbal texts and vice versa, in other words, it is likely that the participants of the image are recognized as “generic/presenting” and the

participants of the verbal texts are identified as “specific/presuming” and vice versa. The presence of such a cohesive tie shows that the participants of one of the semiotic modes (visual or verbal text) can be traced in other semiotic resource. This could prove there is intersemiotic relationship between the participants of the images and verbal texts of the dialogues. However, all images of the dialogues are drawings with low colour contrast and highly saturated that demarcate the reality of the images. Therefore, participants who are depicted in verbal texts are not finely illustrated in images to depict their details and this fact to some extent diminishes the cohesion between image and verbal text through reference. The findings of the study indicate that all the images of the dialogues are more salient compared to verbal text in terms of size and the amount of space located to them. In addition, the two semiotic resources (image and language) are disconnected by the spatial framing. According to Kress and van Leeuwen (2006), the disconnectedness between the semiotic resources makes a text less cohesive. Furthermore, most of the images are placed at the top of the pages and verbal texts are at the bottom, therefore, it can be claimed that the reading path is likely from image to verbal texts and it can be concluded that image could be “the point of departure of the message” and considered as Theme and verbal could be thus regarded text as Rheme. Similarly, this is evidence of cohesion in terms of information flow.

Supporting Jones’s (2006) suggestion, the analysis of the current study shows that it is likely the placement and distribution of the image and verbal text of dialogues on a page is not [completely] influenced by “information value” but “designer’s grid” (p.244). Kress and van Leeuwen (1996, 2006) relate information value to the meaning stemmed from placement of visual and verbal components of a multimodal text in different areas of the page. On the other hand, Bateman et al. (2004) critique such multimodal text analysis for being overly related to interpretation and not supported by practical

evidence. Moreover, design and cost constraint are not taken into consideration in this kind of approach to analysis of multimodal texts (Jones, 2006).

Kress and van Leeuwen (1996, 2006) propose particular placement for Given and New information of texts. They assign left side to Given and right side to New information in magazine layout. They further believe that the Given information is usually placed in verbal text but the New is presented by visual illustrations. In the dialogues of Iranian English textbooks, there is no such a left/ right- New/Given pattern and this contrast has been addressed by other studies (Jones, 2006; Guijarro and Sanz, 2008). Nearly in all dialogues images appear on the top of the page and verbal text lies at the bottom. The images almost bear the general information about Iranian life style, social and cultural concepts which students already know, thus the images of the dialogues can be regarded as Given information. While the verbal texts which narrate the story exchanged between dialogue speakers encompass the details about the participants are illustrated in image, hence, they could be considered as New information. As a result, it can be inferred that the images and the verbal texts of the dialogues are in top-bottom/Given-New pattern unlike what is proposed by Kress and van Leeuwen (1996, 2006).

The data analysis also shows that the visual and the verbal structures of some of the dialogues are in complete parallelism while a few of them are not parallel at all and some are partially parallel. Therefore, it can be concluded that little attention is given to structure parallelism as a textual cohesive tie in the dialogues of the Iranian English textbooks. Parallelism is evident in connotations brought about by the verbal and visual texts of the dialogues. As discussed in section 4.3.2, images in the dialogues depict culture-religion meanings. The way human participants are illustrated (e.g. wearing hijab and long dress by female participants and the males with beard and mustache) in nearly all the images bear religious connotations that show Islamic concepts and these religious connotations are strongly supported by the use of Islamic names for

participants in the verbal texts (for example, Amir, Zahra, Ali, Mehdi, Hamid). Therefore, it can be claimed that verbal and visual texts of the dialogues are integrated in a cohesive way in terms of delivering similar religious connotations. This is important as Iranian students reading the dialogues can easily relate to the images and the Islamic names before trying to understand the situation put forth by each dialogue to introduce grammatical structures. This will better facilitate learning as students need only process the grammatical structures to be studied.

The findings of the study reveals that visual structures of the images and verbal structures of the verbal texts play the very important role in narration since the experiences are depicted through the processes presented in these semiotic modes. On the basis of the findings, it can thus be deduced that both language and image develop a narration in some cohesive way.

In all dialogues, the cultural connotations inserted in illustrations help students to understand the setting of the story as well as status of the participants of the dialogues and therefore, feel close to the illustrated participants. For example, as shown in Figure 4.16, all students are neatly sitting at the desk and one of them which is in colour and thus salient is raising his hand to get permission from the presented teacher. On the other hand, the linguistic text of the dialogue also depicts the culture of getting permission while leaving the classroom. As it is obvious, the depicted culture in images of the dialogues and the culture shown in verbal texts of the dialogues are in the same path and guarantee the cohesive integration of visual and verbal texts of dialogues in terms of cultural connotations.

## May I leave the classroom?



Ali: Excuse me, sir.  
Teacher: Yes, what is it?  
Ali: Reza doesn't feel well.  
Teacher: What's the matter, Reza?  
Reza: I have a headache.  
Teacher: Can't you stay in the classroom?  
Reza: No, I can't. May I leave now?  
Teacher: Sure. But you should come back after the break.

Figure 4.16: Extract from Textbook Three

## **CHAPTER FIVE**

### **CONCLUSION**

#### **5.1 Introduction**

This Chapter presents the concluding remarks of the study. It commences with a summary of the research findings based on the research questions and this is then followed the implications of the study and suggestions for further research.

#### **5.2 Summary of Findings**

The significance of the integration of the different semiotic choices in meaning construction cannot be denied since language is not the only mode of communication among human societies (Kress and van Leeuwen, 2006). Since the past two decades, other semiotic resources such as gesture, image and sound have been competing with language as important semiotic resources. Thus, such relationship between semiotic resources at a discourse level has encouraged scholars and researchers (e.g. Kress and van Leeuwen, 1996, 2006; O Toole, 1994, 2010; Jewitt, 2003; Liu and O'Halloran, 2009; Lim, 2011) to go beyond language and undertake studies on other semiotic elements in order to see how they merge together and what role they play in a multimodal discourse.

The important role of a multimodal text has inspired educators to integrate different semiotic elements to create more efficient medium of learning, for example, textbooks are recently designed by incorporating real pictures rather than drawings to make the topic presented more tangible and can be better understood. However, the research on multimodal text creation is still lacking and more research is needed to be undertaken.

This study was thus set out to investigate how image and language of the dialogue sections in Iranian English textbooks of Middle school integrate to make a cohesive text. These English textbooks are aimed at students who have not never learned the English language before. With regard to the methodology of the study, identification of the visual and verbal elements of the dialogues of Iranian English textbooks was first carried out and then on the basis of the visual and verbal elements identified, intersemiotic textual cohesion of the elements was examined. Therefore, three research questions were proposed and the findings will be discussed on the basis of the questions as presented in the following paragraphs.

5.1.1- How are the verbal elements realised in the dialogue sections found in Iranian English Textbooks?

Halliday's (2004) transitivity framework was adopted to identify the process types of linguistic elements of the data. Relying on Halliday's transitivity system, all six process types namely Material, Mental, Relational, Verbal, Behavioural and Existential as well as the participants involve with the processes were identified in the dialogues of Iranian English textbooks.

Evidence of the processes identified in the three textbooks proves the fact that the process types used in the dialogues of the different textbooks are dependent upon the level of language proficiency presumed of the students using the textbooks. Findings of the study show that the Relational and Material processes are the most frequently presented processes in these textbooks. In comparison to the other processes, these process are tangible and concrete and hence they are easy to be grasped students who have just begin to learn English. Relational process which is the most frequently occurring process in all three English textbooks aims at presenting the relation between two entities (Halliday, 2004) which are presented in simple and tangible structures.

Material process which is the second most frequently found in the data, manifests dynamism and actions to express students' everyday routines and experiences. In fact, the three textbooks introduce more "tangible" processes to help students understand the text more easily (Presnyakova, 2011).

Behavioural, Existential, Mental and Verbal processes are less frequently found than Relational and Material processes and it seems they are included in these series of English textbooks to expand students' knowledge concerning grammatical structure and vocabulary repository. Mental sentences which are used to express more abstract matters such as cognition, perception and desideration (Halliday, 2004) are introduced in Textbook Three only. As such, easier tangible processes are introduced at the beginning stage of learning English and processes that deal with complex and abstract matters are dealt with at the later stage of learning the language.

#### 5.1.2- How are the visual elements realized in the dialogue sections found in Iranian English Textbooks?

The visual elements of the dialogues were examined in terms of Narrative and Conceptual representation using Kress and van Leeuwen's (2006) theoretical framework.

The findings of the study found that most of the images are Narrative representation. According to Kress and van Leeuwen (2006), Narrative representation can be categorized into Action, Reaction, Verbal and Mental process. In all three English textbooks only the first three processes namely Action, Reaction and Verbal are identified. Action process is the most frequent process in the images of the dialogues of all the three English textbooks and it depicts action and doings of the represented participants through vectors showing interaction of the participants of the image. Action



process in the images of the dialogues is found to present detailed experiences exchanged between speakers of the dialogues and is thus able to compensate for the shortage of detailed description in the verbal text of the speakers. These series of English textbooks is limited to presenting short texts due to the lack of English language proficiency among Iranian students at this level.

Reaction process is the second most frequently occurring process in the data. It depicts the interaction of the participants in the images through eyelines (Kress and van Leeuwen, 2006) while they were talking to each other.

Verbal process is recognized by the vectors created by the protrusion emanating from the dialogue balloons (Kress and van Leeuwen, 2006). Analysis of the study indicated that Verbal process which appears in 12% of the total processes is unevenly distributed in the three English textbooks. The utterances of nearly all Verbal processes are visual rather than linguistic in other words, the visual utterances are the pictures that embedded in the dialogue balloons and they illustrate either the topic of the conversation or the narration of the story told by speakers. Visual utterances may allow learners to easily understand the actions and happenings of the story in the dialogues.

Analysis of the images of the dialogues revealed a new process within the Narrative representation. Unlike the other processes in representation, this process is realized by more than one vectors. As it is shown in Figure 5.1, these vectors occur simultaneously while two participants are talking with each other where they are both seen making eye contact (reaction vector) and one of the participants gesturing with his hand (action vector) to create interaction with the other one.

These vectors illustrate communication between two participants in the dialogues and therefore, this study would like to term it as Communication process.

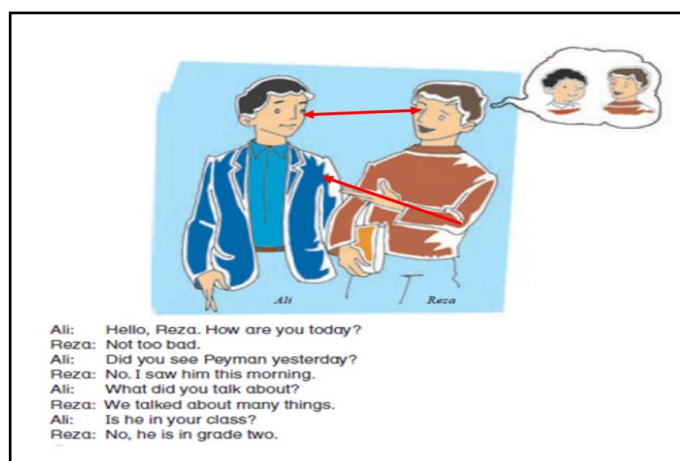


Figure 5.1: Extract from Textbook Three

Conceptual analysis of the data reported the presence of two categories namely Analytical and Symbolic Attributive processes. Analytical process of the images of the dialogues manifests the generic interpretation of the participants in the images which viewers can immediately recognize what the entity is, such as trees, cars, school buildings. Symbolic Attributive process found in the images depicts Iranian culture where male teachers in formal suit and female students wearing hijab provide religious connotations of Iran.

### 5.1.3- How do the visual and verbal elements interact with each other to establish cohesion in Iranian English textbooks?

This study primarily examines the visual and verbal texts of the dialogues of Iranian English textbooks in terms of representation analysis to see how the linguistic and image elements presented experiences in the dialogues. Then, it explores intersemiotic cohesion between these two differently structured semiotic components using Liu and O'Halloran's (2009) framework of textual cohesive devices. According to Liu and O'Halloran (2009), there are four cohesive devices namely Reference system, Theme-Rheme Development, Given-New Organization and Parallel Structure.

The system of Reference is concerned with identifying relationship established across semiotic components or within a semiotic resource of a text (Liu and O'Halloran, 2009). Following Jones (2006), Reference system of the data was investigated on the basis of “generic/presenting” and “specific/ presuming”. Such an analysis indicates which semiotic component introduces the presented participants and this is termed as generic/presenting and which one reintroduces them and this is termed as specific/presuming. Findings of the analysis showed that the participants of the dialogues can be introduced and presented in the visual elements and presumed in verbal texts or vice versa. Thus, cohesion in terms of reference between the two semiotic modes is established.

Theme-Rheme development introduced by Liu and O'Halloran (2009) refers to Kress and van Leeuwen's (2006) “Salience” and “Framing”. The analysis of the images and the verbal texts of the dialogues revealed that all the images are more salient in terms of size and the space in which they occupy. Moreover, they are placed at the top of the page and such a fact helps the images to be viewed earlier than verbal texts in a linear reading pattern (Kress and van Leeuwen, 2006).

With respect to Framing of the elements, most of the images and verbal texts of the dialogues are placed in top-bottom pattern and are clearly disconnected by space. Such disconnectedness removes the unity of the two semiotic elements and hence makes the texts less cohesive (Kress and van Leeuwen, 2006). Only two dialogues contain visual and verbal components which are placed in left-right pattern and even that the verbal texts in these dialogues are inserted in the dialogue balloons which are regarded as part of the images. As such the visual and verbal elements of these two dialogues are to some degree integrated with each other and it leads to the stronger intersemiotic cohesion between components of these dialogues as compared to those dialogues

arranged in the top-bottom pattern. Therefore, it can be concluded that the images of the dialogues play the role of Theme because of their salience and placement while verbal texts are considered as Rheme on the account of their placement at the bottom of the page and likely to be disconnected from the image. This disconnetedness proves that semiotic modes are only partially cohesive in terms of theme-rheme device.

All the visual components of the dialogues is found to depict Iranian everyday concepts which is considered as general information about Iranian lifestyle that students are familiar with. On the other hand, verbal texts provide the details of the participants or the story exchanged between the speakers of the dialogues which is considered as New information which students do not have knowledge of. Therefore, it can be inferred that the images present Given information and verbal texts express New information.

According to Liu and O'Halloran, images and verbal texts are parallel when they "share a similar form" (p.372). The findings of the study indicated that the semiotic components of some of the dialogues consist of parallel structures while the semiotic elements of other dialogues do not completely share similar structures and these visual and verbal elements are identified as partially parallel.

Overall, this study proves that the relationship between the images and the verbal texts of the dialogues are not completely cohesive. Consequently, this also substantiates that the visual and verbal texts are not in a very strong intersemiotic textual cohesion in terms of the identified cohesive devices.

### **5.3 Implication of the Study**

Findings of this study imply that verbal and visual components of the texts analysed are not completely cohesive intersemiotically. For this reason, this study would like to emphasise the importance of cohesion between image and linguistic texts where the

presence of strong cohesive ties between the two semiotic resources will contribute to a better understanding of the messages intended in the texts. More research on analyzing cohesion ties in other texts should then be carried out.

Furthermore, this study can be a useful reference for other researchers who are interested to study the relationship between different semiotic resources specifically image and language. Besides, findings of this research could be a practical guide for designers and illustrators of school textbooks to prepare quality textbooks in terms of how information can be realized via different semiotic modes such as image and linguistic elements in the texts. The educators can also refer to this study to be aware of how critical a cohesive multimodal textbook is for learning and delivering a message.

#### **5.4 Suggestion for Further Research**

The current study has further contributed knowledge in the field through textual cohesion analysis of the visual and the verbal texts of the dialogue sections of Iranian English textbooks. There are other Sections in the textbooks like “*Patterns*” which teach new grammatical structures inserted in each lesson and this was not analysed in this study. Therefore, similar research can be conducted on other Sections of the books. Likewise, more research can be undertaken on other English language books of other levels in the Iranian school system.

Follow-up studies can be carried out to research, the interpersonal aspect of these textbooks to see how the content of the textbooks which is transferred through varieties of semiotic elements can affect the interaction between the readers and the semiotic modes or between readers and the authors of the textbooks. Moreover other multimodal texts such as advertisements, films, and computer-based books can be investigated in terms of intersemiotic cohesion from ideational and textual aspect between different

semiotic elements in order to strengthen the discussion on cohesion between varieties of semiotic modes.

## **5.5 Conclusion**

This Chapter has discussed the findings of the study relying on the three research questions outlined for the study. It has also put forth the implication of the study and the suggestions for potential future research. It is hoped that findings of this study and those of future research on Iranian textbooks would greatly contribute towards making the textbooks more effective for the coming generation of students in Iran learning the English language.

## REFERENCE

- Abdollahzadeh, E., & Baniasad, S. (2010). Ideologies in the imported English textbooks: EFL learners and teachers' awareness and attitude. *Journal of English Language Teaching and Learning*, 53(217), 1-17.
- Aliakbari, M. (2004). The place of culture in the Iranian ELT textbooks in high school level. In *9th Pan-Pacific Association of Applied Linguistics Conference, Namseoul University, Korea*. Retrieved (Vol. 21, No. 09, p. 2008).
- Baldry, A.P., and P. Thibault. 2006. *Multimodal transcription and text analysis*. London:Equinox.
- Barthes, R. (1977). *Elements of semiology*. (1st American ed.). New York: Hilland Wang.
- Barthes, R. (1970). *Mythologies*. Paris: Seuil.
- Barthes, R. (1977). *Image-music-text*. London: Fontana Press.
- Bateman, J.A. (2008). *Multimodality and genre: A foundation for the systematic analysis of multimodal documents*, Palgrave Macmillan.
- Castro, C. D. (2004). Cohesion and the social construction of meaning in the essays of Filipino college students writing in L2 English. *Asia Pacific Education Review*, 5(2), 215-225.
- Chen, Y. (2010). The semiotic construal of attitudinal curriculum goals: Evidence from EFL textbooks in China. *Linguistics and Education*, 21(1), 60–74.
- Cheng, K. K. Y., & Beigi, A. B. (2011). Addressing students with disabilities in school textbooks. *Disability & Society*, 26(2), 239–242.
- Cheng, K. K. Y., & Beigi, A. B. (2012). Education and religion in Iran: The inclusiveness of EFL (English as a Foreign Language) textbooks. *International Journal of Educational Development*, 32(2), 310–315.
- Cheong, Y.Y. 2004. The construal of Ideational meaning in print advertisements. In *Multimodal discourse analysis: Systemic functional perspective*, ed. Kay L. O'Halloran, 163\_95. London: Continuum.
- Ebrahimi, S. F., & Khedri, M. (2011). Thematicity in research article abstracts: A cross-disciplinary study. *Educational Quest-An International Journal of Education and Applied Social Sciences*, 2(3), 287-292.
- Ebrahimi, S. J., & Ebrahimi, S. F. (2012). Textuality in Academic Reading Text : A Case of Native and Non-native Writers, *1*(3), 258–261.

- Egins, S. (2004) *An Introduction to Systemic Functional Linguistics*, 2nd edn. London: Continuum.
- Feng, D., & O'Halloran, K. L. (2012). Representing emotive meaning in visual images: A social semiotic approach. *Journal of Pragmatics*, 44(14), 2067–2084.
- Forceville, C. (2011). Pictorial runes in Tintin and the Picaros. *Journal of Pragmatics*, 43(3), 875-890.
- Gharbavi, A., & Ahmad Mousavi, S. (2012a). The Application of Functional Linguistics in Exposing Gender Bias in Iranian High School English Textbooks. *English Language and Literature Studies*, 2(1), 85–93.
- Gharbavi, A., & Mousavi, S. (2012b). A content analysis of textbooks: Investigating gender bias as a social prominence in Iranian High School English textbooks. *English Linguistics Research*, 1(1), 42–49.
- Guilani, M. A., Yasin, M. S. M., & Hua, T. K. (2011). Authenticity of Iranian English Textbooks for Schools. *English Language and Literature Studies*, 1(2), 25–30.
- Guo, L. (2004) 'Multimodality in a Biology Textbook', in K.L. O'Halloran(ed.) *Multimodal Discourse Analysis*, pp. 196–219. London:Continuum.
- Ivry, R.B. and Robertson, L.C. (1998) *The Two Sides of Perception*. Cambridge, MA: MIT Press.
- Halliday, M.A. K.(1978) *Language as Social Semiotic: The Social Interpretation of Language and Meaning*. London: Arnold.
- Halliday, M. A.K. (1994). *Functional grammar*. London: Edward Arnold.
- Halliday, M.A.K. (2004). *An introduction to functional grammar (3rd ed.)*, London: EdwardArnold.
- Halliday, M.A.K. (1976). &R. Hasan. *Cohesion in English*: London: Longman.
- Halliday, M.A.K. and Matthiessen, C.M.I.M. (1999) *Construing Experience through Meaning: A Language Based Approach to Cognition*. London:Cassell.
- Hull, G. A., & Nelson, M. E. (2005). Locating the semiotic power of multimodality. *Written Communication*, 22(2), 224-261.
- Jewitt, C. 2002. The move from page to screen: The multimodal reshaping of school English. *Visual Communication*, 1(2), 171-196.
- Jewitt, C. (2003). Re-thinking Assessment: Multimodality, literacy and computer-mediated learning. *Assessment in Education: Principles, Policy & Practice*, 10(1), 83–102.
- Jewitt, C., & Kress, G. (Eds.). (2003). *Multimodal literacy*. New York: Peter Lang.



- Jones, J. (2006). Multiliteracies for academic purposes : A metafunctional exploration of intersemiosis and multimodality in university textbook and computer-based learning resources in science
- Khedri, M., & Ebrahimi, S. F. (2012). The essence of thematic structures in the academic translated texts. *Journal of Education and Practice*, 3(1), 37-43.
- Kress, G. (1997). Visual and verbal mode of representation in electronically mediated communication: The potentials of new forms of text. In I. Snyder (Ed.), *Page to screen: Taking literacy into the electronic age*. Sydney: Allen & Unwin.
- Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Routledge.
- Kress, G. R., & Van Leeuwen, T. (1996). *Reading images: The grammar of visual design*. Psychology Press.
- Kress, G., & Van Leeuwen, T.V. 2001. Multimodal discourse: The modes and media of contemporary communication.
- Kress, G. and van Leeuwen, T. 2006. *Reading Images: The Grammar of Visual Design*. (2nd Edition) London: Routledge.
- Lemke, J.L. 1990. Talking science: Language, learning, and values. Vol. 1. London: Ablex.
- Lemke, J.L. (1998). Multimedia literacy demands of the scientific curriculum. *Linguistics and education*, 10(3), 247-271.
- Lemke, J.L. (2002) 'Travels in Hypermodality', *Visual Communication* 1(3):299–325.
- Lim, F.V. (2011). Multimodal Discourse Analysis Approach to Pedagogic Discourse. Doctoral Thesis, National University of Singapore.
- Lim, F.V., & Halloran, K. O. (2010). the Ideal Teacher: an Analysis of a Teacher-Recruitment Advertisement, *Semiotica*.
- Liu, Y., & O'Halloran, K. L. (2009). Intersemiotic Texture: analyzing cohesive devices between language and images. *Social Semiotics*, 19(4), 367–388.
- Martin, J. (1992). *English text: System and structure*. Amsterdam: Benjamins.
- Martin, J. R., Matthiessen, C.M.I.M., & Painter, C. (1997), *Working with Functional Grammar*. London, Arnold.
- Martin, J. (2000). Beyond exchange: Appraisal systems in English. In S. Hunston & G. Thompson (Eds.), *Evaluation in text: Authorial stance and the construction of discourse* (pp. 142-175). Oxford: Oxford University Press.
- Martinec, R. (1998) 'Cohesion in Action', *Semiotica* 120(1/2): 161–80.
- Martinec, R. (2001). Interpersonal resources in action. *Semiotica*-, 135(1/4), 117-146.

- Martin, J.R. and Rose, D. (2003) *WorkingWithDiscourse:Meaning Beyond the Clause* (Vol.1). London: Continuum.
- Martinec, R., & Salway, A. (2005). A system for image–text relations in new (and old) media. *Visual communication*, 4(3), 337-371.
- Martínez, I. A. (2001). Impersonality in the research article as revealed by analysis of the transitivity structure. *English for Specific Purposes*, 20(3), 227-247.
- Moya Guijarro, A. J. (2011). Engaging readers through language and pictures. A case study. *Journal of Pragmatics*, 43(12), 2982–2991.
- Moya Guijarro, J., & Pinar Sanz, M. J. (2008). Compositional, interpersonal and representational meanings in a children's narrative. *Journal of Pragmatics*, 40(9), 1601-1619.
- Nikolajeva, M., & Scott, C. (2000). The dynamics of picturebook communication. *Children's Literature in Education*, 31 (4), 225-239.
- Nodelman, P. (1988). Words about pictures: The narrative art of children's picture books. University of Georgia Press.
- O'Halloran, K. L. (2005). *Mathematical discourse: Language, symbolism and visual images*. Continuum.
- O'Halloran, K. L. (2008). *Systemic functional-multimodal discourse analysis (SF-MDA): constructing ideational meaning using language and visual imagery*. *Visual Communication* (Vol. 7, pp. 443–475).
- O'Toole, M. (1994/2010). *The language of displayed art* (2nd edition). London & New York: Routledge (1st edition 1994).
- Painter, C. (2008). The role of colour in children's picture books. In L.
- Presnyakova, I. (2011). Systemic Functional Analysis of Elementary School Language Arts Textbooks. Master Thesis, Marshal University.
- Razmjoo, S.A. (2007). High Schools or Private Institutes Textbooks? Which Fulfill Communicative Language Teaching Principles in the Iranian Context? *The Asian EFL Journal Quarterly December 2007 Volume 9, Issue 4*, 126.
- Robertson, J. (2008). *Fourth-and Fifth-grade Classroom Case Study of Response to Multimodal Representations in Children's Picture Books*. Doctoral Thesis, Syracuse University.
- Royce, T. (1998). Synergy on the page: Exploring intersemiotic complementarity in page-based multimodal text. *JASFL Occasional Papers*, 1(1), 25-49.
- Royce, T. D. (2002). Multimodal Communicative Competence in Second Language Contexts, 361–390.

- Royce, T. (2007). Intersemiotic complementarity: A framework for multimodal discourse analysis. *New directions in the analysis of multimodal discourse*, 63-109.
- Siegel, M. (2006). Rereading the signs: Multimodal transformations in the field of literacy education. *Language Arts*, 84(1), 65-77.
- Sipe, L. R. (1998). How picture books work: A semiotically framed theory of text-picture relationships. *Children's Literature in Education*, 29(2), 97-108.
- Smith, R. S. (1995). Young children's interpretations of gender from visual text and narrative. *Linguistics and Education*, 7(4), 303-325.
- Sunderland, J. (2006). *Language and gender*. Routledge.
- Taib F. 2010. A Systemic Functional Multimodal Analysis of Business Brochures. Doctoral Dissertation, University Malaya.
- Thibault, P. (2000) 'The Multimodal Transcription of a Television Advertisement: Theory and Practice', in A.P. Baldry (ed.) *Multimodality and Multimediality in the Distance Learning Age*, pp.311-85. Campobasso: Palladino Editore.
- Thompson, G. (1996). Introducing functional grammar. *structure*, 4, 2.
- van Leeuwen, T. (1991). Conjunctive structure in documentary film and television. Continuum: *Journal of Media & Cultural Studies*, 5(1), 76-114.
- van Leeuwen, T. (1999). *Speech, music, sound*. London: Macmillan.
- van Leeuwen, T. (2008). Space in discourse. In L. Unsworth (Ed.), *Multimodal semiotics: Functional analysis in contexts of education* (34-49). London & New York: Continuum.
- Unsworth, L. (2001). *Teaching multiliteracies across the curriculum: Changing contexts of text and image in classroom practice*. Buckingham, United Kingdom: Open University Press.
- Unsworth, L., & Wheeler, J. (2002). Re-valuing the role of images in reviewing picture books. *Reading: Language and Literacy*, 36(2), 68-74.
- Unsworth, L. (2006). Towards a metalanguage for multiliteracies education: Describing the meaning- making resources of language-image interaction LEN UNSWORTH, 5(1), 55-76.
- Unsworth, L. (2008). Multiliteracies and metalanguage: Describing image/text relations as a resource for negotiating multimodal texts. *Handbook of research on new literacies*, 377-405.
- Unsworth, L. (2011). *New literacies and the English curriculum*. Continuum.
- Wertheimer, M. (1938) 'The General Theoretical Situation', in W.D. Ellis (ed.) *A Source Book of Gestalt Psychology*. London: Kegan, Paul & Trench/Trubner & Co. Ltd.

Zhao, S. (2011). Learning Through Multimedia Interaction: The Construal of Primary Social Science Knowledge in Web-based Digital Learning Materials. Doctoral Thesis, University of Sydney.

## **SUPPLEMENTARY**

### **CONFERENCE PRESENTATIONS**

- Attar, M. M. and Taib, F.(2013). “Intersemiotic Textual Cohesion Analysis of Multimodal Elements in Iranian English Textbooks”. Paper presented at 3rd International Conference, Applied Linguistics and Professional Practice (ALAPP): Collaborating across Disciplinary and Professional Boundaries, Kuala Lumpur, University of Malaya, December 12-14.
- Attar, M. M. and Taib, F.(2013). “Multiplicative Meaning Construction in Multimodal Storybooks”. Paper presented at the 17th English in Southeast Asia Conference (ESEA 2013), Kuala Lumpur, University of Malaya, December 5-7.
- Attar, M. M. and Hallajian, A. (2013). “Visual and Verbal Representation Analysis in Iranian English Textbooks”. Paper presented at the 4th FLL International Postgraduate Conference: Expanding Research in Languages and Linguistics in Asia, Kuala Lumpur, University of Malaya, April 11-12.

## APPENDICES

### Appendix A

#### Samples of Verbal Analysis of the Dialogues of Iranian English Textbooks

##### Samples of Verbal Analysis of the Dialogues of English Textbook One:

Good morning

Good morning

Are you a student?

**Process: attributive relational   Carrier: you   Attribute: a student**

Yes, I am.

**Process: attributive relational   Carrier: I   Attribute: a student**

What about you?

I'm a student, too.

**Process: attributive relational   Carrier: I   Attribute: a student**

---

Is this a desk?

**Process: attributive relational   Carrier: this   Attribute: a desk**

No

It isn't.

**Process: attributive relational   Carrier: it   Attribute: a desk**

No

What is it?

**Process: attributive relational   Carrier: it   Attribute: What**

It's a table.

**Process: attributive relational   Carrier: it   Attribute: a table**

---

Hello, Zahra.

Hello, Maryam.

How are you today?

**Process: attributive relational   Carrier: you   Attribute: How   Circumstance: today**

Just fine.

What's this?

**Process: Attributive relational   Carrier: this   Attribute: What**

That's an orange.

**Process: Attributive relational   Carrier: that   Attribute: an orange**

Is that an orange, too?

**Process: Attributive relational   Carrier: that   Attribute: an orange**

No, this is an apple.

**Process: Attributive relational   Carrier: that   Attribute: an apple**

---

Hello, Ali.

How are you today?

**Process: Attributive relational   Carrier: you   Attribute: How**

Just fine. Thank you.

How is school?

**Process: Attributive relational   Carrier: school   Attribute: How**

It is Ok.

**Process: Attributive relational   Carrier: it   Attribute: Ok**

Have you English today?

**Process: Attributive relational   Carrier: you   Attribute: English**

Yes, we have. What about you?

No, we haven't.

---

Are there many cars in the street, Parvin?

**Process: existential   Existent: many cars   Circumstance: in the street**

Yes, there are many cars in the street.

**Process: existential   Existent: many cars   Circumstance: in the street**

Are there many buses in the street, too?

**Process: existential   Existent: many buses   Circumstance: in the street**

No, there aren't.

**Process: existential   Existent: many buses**

### **Samples of Verbal Analysis of the Dialogues of English Textbook Two:**

Excuse me.

Have you a red pencil?

**Process: Attributive relational   Carrier: you   Attribute: a red pencil**

No, I haven't.

Have you a pen?

**Process: Attributive relational   Carrier: you   Attribute: a pen**

Yes, I have.

**Process: Attributive relational   Carrier: you   Attribute: a pen**

What colour is it?

**Process: Attributive relational   Carrier: it   Attribute: what colour**

It's red.

**Process: Attributive relational   Carrier: it   Attribute: red**

Here you are.



**Process: Attributive relational   Carrier: you   Attribute: here**

Thank you.

---

Are there many cars in the street, Parvin?

**Process: existential   Existent: many cars   Circumstance: in the street**

Yes, there are many cars in the street.

**Process: existential   Existent: many cars   Circumstance: in the street**

Are there many buses in the street, too?

**Process: existential   Existent: many buses   Circumstance: in the street**

No, there aren't.

**Process: existential   Existent: many buses**

There is one bus in the street.

**Process: existential   Existent: one bus   Circumstance: in the street**

---

Hello, I am Hossein Karami.

**Process: Identifying relational   Value: I   Token: Hossein Karami**

What's your name?

**Process: Identifying relational   Value: your name   Token: what**

My name is Nasser Omid.

**Process: Identifying relational   Value: my name   Token: Nasser Omid**

Is that your car?

**Process: Identifying relational   Value: your car   Token: that**

No, it isn't.

**Process: Identifying relational   Value: your car   Token: it**

Whose car is it?

**Process: Identifying relational   Value: whose car   Token: it**

It's Ali's.

**Process: Identifying relational   Value: Ali's   Token: it**

He is my brother.

**Process: Identifying relational   Value: my brother   Token: He**

---

My father is a farmer.

**Process: Attributive relational   Carrier: my father   Attribute: a farmer**

What's your father, Ali?

**Process: Attributive relational   Carrier: your father   Attribute: what**

He is a teacher.

**Process: Attributive relational   Carrier: He   Attribute: teacher**

Does he teach Persian?

**Process: material   Actor: he   Goal: Persian**

No, he doesn't.

He teaches English.

**Process: material   Actor: he   Goal: English**

Do you study English every day?

**Process: material   Actor: you   Goal: English**

No, I don't.

**Process: material   Actor: you   Goal: English**

I study English on Sundays and Tuesdays.

**Process: material   Actor: I   Goal: English   Circumstance: Sundays and Tuesday**

---

Who is that man, Ali?

**Process: Identifying relational   Value: Who   Token: that man**

He is Mr Hamidi.

**Process: Identifying relational   Value: Mr. Hamidi   Token: He**

What is he?

**Process: Attributive relational   Carrier: he   Attribute: what**

He is our teacher.

**Process: Identifying relational   Value: our teacher   Token: he**

Where does he live?

**Process: material   Actor: he   Circumstance: where**

He lives on Azadi Street.

**Process: material   Actor: he   Circumstance: on Azadi Street**

How many students does he teach?

**Process: material   Actor: he   Goal: how many students**

He teaches many students.

**Process: material   Actor: he   Goal: many students**

### **Samples of Verbal Analysis of the Dialogues of English Textbook Three:**

-Oh, look!

**Process: behavioural   Behavior: you**

There's a wallet on the ground.

**Process: existential   Existent: a wallet   Circumstance: on the ground**

Is it your wallet?

**Process: Identifying relational   Value: your wallet   Token: it**

-No, it isn't.

**Process: Identifying relational   Value: your wallet   Token: it**

The colour of my wallet is brown,

**Process: Attributive relational**      **Carrier: the colour of my wallet**      **Attribute:**  
**brwon**

but this one is yellow.

**Process: Attributive relational**      **Carrier: this one**      **Attribute: yellow**

-Perhaps it's Ahmand's.

**Process: Identifying relational**      **Value: Ahmad's**      **Token: it**

He is there at the bus stop.

**Process: Attributive relational**      **Carrier: he**      **Attribute: there at the bus stop**

-I don't know Ahmad.

**Process: mental**      **Senser: I**      **phenomenon: Ahmad**

What does he look like?

**Process: Attributive relational**      **Carrier: he**      **Attribute: what**

-He's tall and thin and

**Process: Attributive relational**      **Carrier: he**      **Attribute: tall and thin**

has short black hair.

**Process: Attributive relational**      **Carrier: he**      **Attribute: short black hair**

-Do you know our new teacher?

**Process: mental**      **Senser: you**      **phenomenon: our new teacher**

-No, I don't.

Who's she?

**Process: Identifying relational**      **Value: who**      **Token: she**

-Mrs Tehrani.

She teaches us English.

**Process: material**      **Actor: she**      **Goal: English**      **Client: us**

-Is she a good teacher?

**Process: Attributive relational**      **Carrier: she**      **Attributive: a good teacher**

-Yes, she is.

All the students like her very much.

**Process: mental Sayer: all the students phenomenon: her Circumstance: very much**

-Does she speak Persian in the classroom?

**Process: verbal Sayer: she Verbiage: Persian Circumstance: in the classroom**

-No, she usually speaks English.

**Process: verbal Sayer: she Verbiage: English Circumstance: usually**

---

-What are you doing, mother?

**Process: material Actor: you Goal: What**

-I'm cooking lunch.

**Process: material Actor: I Goal: Lunch**

We have some guests today?

**Process: Attributive relational Carrier: We Attribute: some guests  
Circumstance: today**

-How many guests do we have?

**Process: Attributive relational Carrier: we Attribute: how many guests**

-Five.

Your uncle and his family.

-Can I help you?

**Process: material Actor: I Client: you**

-Yes, get me some rice.

**Process: material Actor: you Client: me Goal:some rice**

-Where is it?

**Process: Attributive relational    Carrier: it    Attribute: where**

-In the closet.

-How much do you need?

**Process: Attributive relational    Carrier: you    Attribute: How much**

-About two kilos.

-All right.

---

Do you ever watch TV, Zohreh?

**Process: Behavioural    Behavior: you    Phenomenon: TV**

Yes, I usually watch TV in the evening.

**Process: Behavioural    Behavior: I    Phenomenon: TV    Circumstance: usually in the evening**

Did you watch the children's program yesterday?

**Process: Behavioural    Behavior: you    Phenomenon: the children's program  
Circumstance: yesterday**

Yes, I enjoyed the cartoons very much.

**Process: Mental    Senser: I    Phenomenon: the cartoons    Circumstance: very much**

Did you watch the news, too?

**Process: Behavioural    Behavior: you    Phenomenon: the news**

Yes, I did.

Oh, when did you finish your homework?

**Process: Material    Actor: you    Goal: your homework    Circumstance: when**  
In the afternoon.

---

Hello, Reza. How are you today?

**Process: Attributive relational    Carrier: you    Attribute: How    Circumstance:**  
**today**

Not too bad.

Did you see Peyman yesterday?

**Process: Mental    Senser: you    Phenomenon: Peyman    Circumstance:**  
**yesterday**

No. I saw him this morning.

**Process: Mental    Senser: I    Phenomenon: him    Circumstance: this morning**

What did you talk about?

**Process: Behavioural    Behavior: you    Circumstance: about what**

We talked about many things.

**Process: Behavioural    Behavior: we    Circumstance: about many things**

Is he in your class?

**Process: Attributive relational    Carrier: he    Attribute: in your class**

No, he is in grade two.

**Process: Attributive relational    Carrier: he    Attribute: in grade two**

---

Did you see the film yesterday evening?

**Process: behavioural    Behavior: you    Phenomenon: the film    Circumstance:**  
**yesterday evening**

No, I didn't. I was helping my mother.

**Process: material    Actor: I    Client: my mother**

What was she doing?

**Process: material    Actor: she    Goal: what**

She was cooking dinner.

**Process: material Actor: she Goal: dinner**

What did you do?

**Process: material Actor: you Goal: what**

I washed the dirty dishes.

**Process: material Actor: I Goal: the dirty dishes**

Did you wash all of them?

**Process: material Actor: you Goal: all of them**

Yes, I did.

---

-Excuse me, sir.

-Yes, what is it?

**Process: Attributive relational Carrier: it Attribute: what**

-Reza doesn't feel well.

**Process: Attributive relational Carrier: Reza Attribute: well**

-What's the matter, Reza?

**Process: Attributive relational Carrier: the matter Attribute: what**

-I have a headache.

**Process: Attributive relational Carrier: I Attribute: headache**

-Can't you stay in the classroom?

**Process: Attributive relational Carrier: you Attribute: in the classroom**

-No, I can't.

May I leave now?

**Process: material Actor: I Circumstance: now**

Sure.

But you should come back after the break.

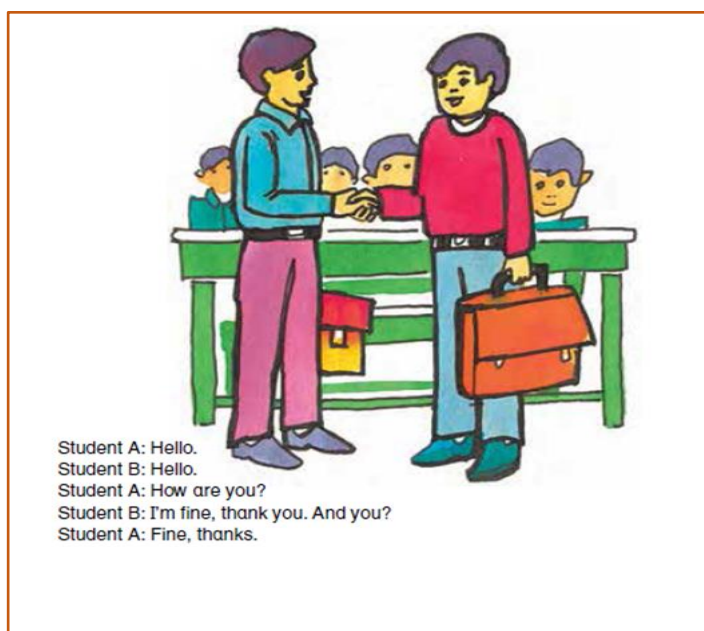
**Process: material Actor: you Circumstance: after the break**



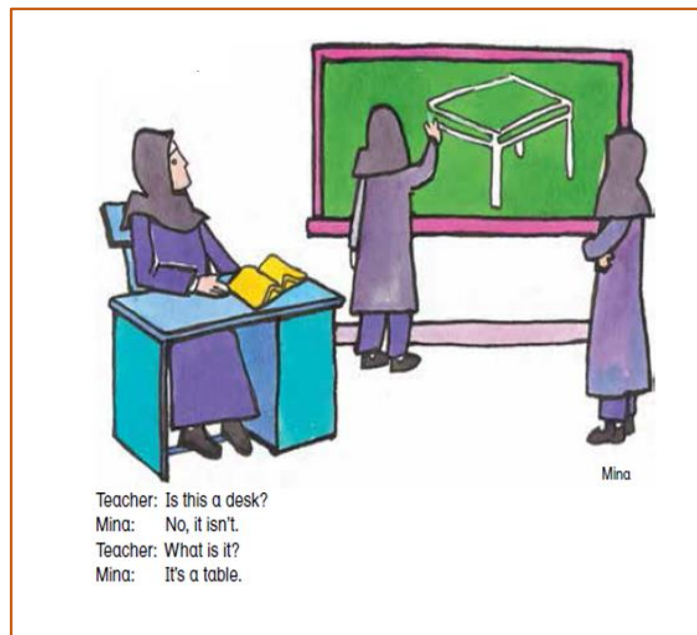
## Appendix B

### Samples of Visual Analysis of the Dialogues of Iranian English Textbooks

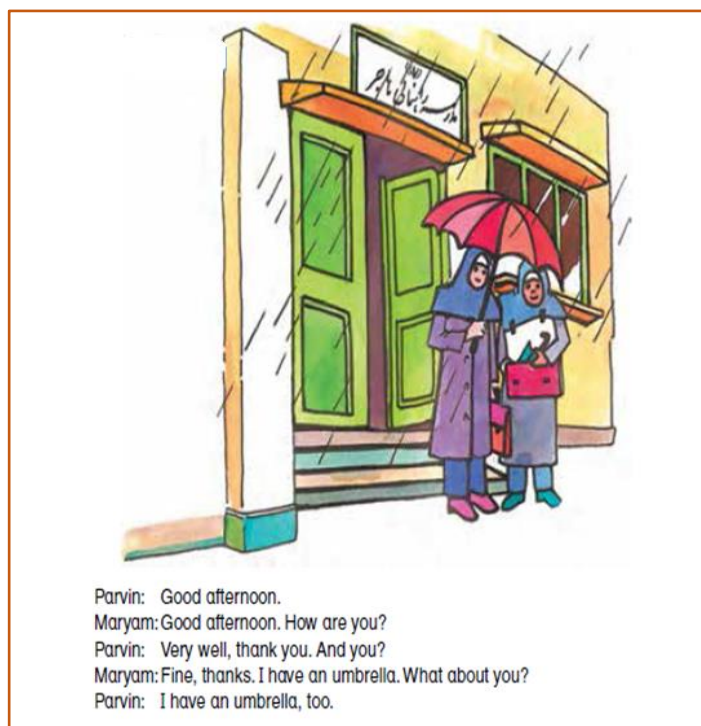
#### Samples of Visual Analysis of the Dialogues of English Textbook One:



Process	Participants	Circumstance
Bidirectional transactional Action	Actor: boys shaking each other's hands  Goal: hands	Students at the background and desks
Transactional reaction	Reactor: Boys looking at each other Phenomenon: the boys	
Symbolic Attributive	Carrier: The boys carrying school bag Attributes: bag, desks and students at the background	
Communication (new category)	Boys facing each other, hands directed to each other	

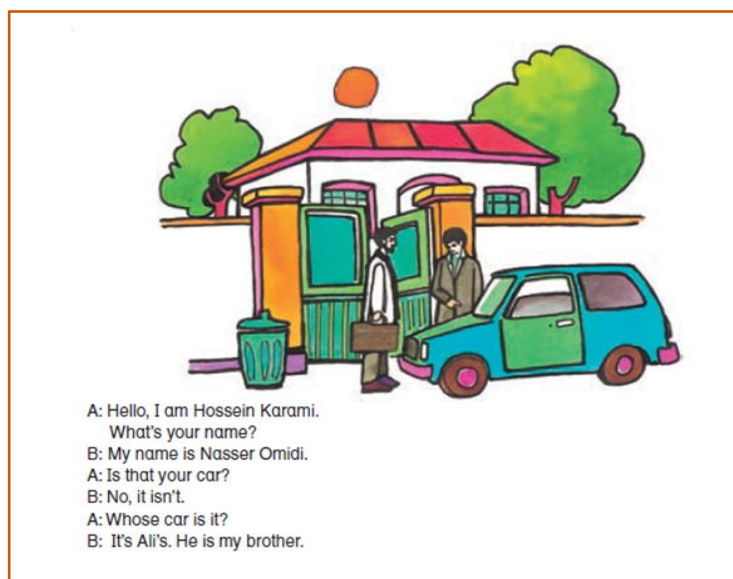


Process	Participant	Circumstance
Action	Actor: The girl drawing on the board Goal: the drawing	Students and the desks Blackboard, teacher's desk and chair portraying a classroom
Reaction	Reactor: Teacher, Mina Phenomenon: student drawing on the board and blackboard	
Analytical	Carrier: Drawing on the board Attribute: four legs of a desk, one rectangle toward up and another toward front (showing the shape of a table)	
Symbolic attributive	Carrier: The woman sitting at the desk as a teacher Attribute: students and the book on the desk	
Symbolic attributive	Carrier: The girls in long dress Attribute: scarf next to black board	

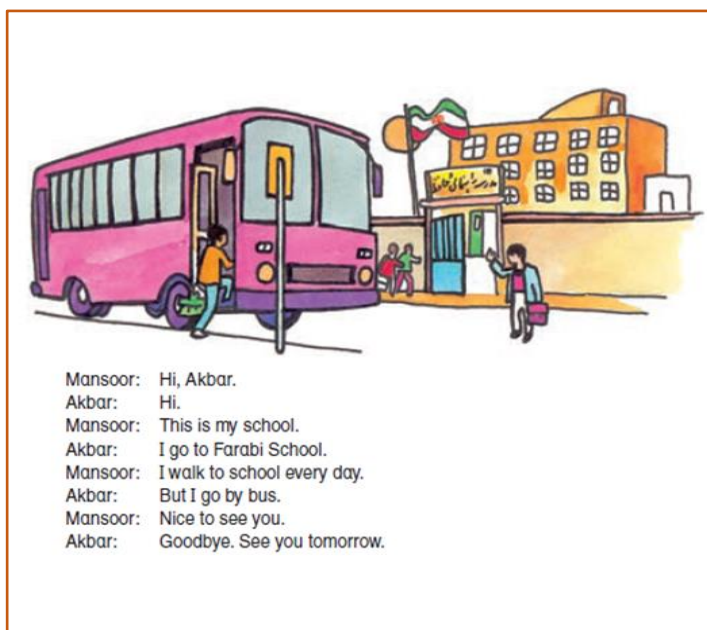


Process	Participant	Circumstance
Reaction	Reactors: 2 female student	School building, School name board, short oblique lines indicating rainy weather portraying outside a school and the rainy weather
Action	Actor: A girl's hand taking out an umbrella from her bag  Goal: Umbrella	
Action	Actor :A girl's hand holding an umbrella  Goal: Umbrella	
Symbolic attributive	Carrier: Female students  Possessive Attributes: school uniforms; scarf, long dress, pants and school bags	
Analytical	Carrier: girls  Possessive Attribute: umbrella	

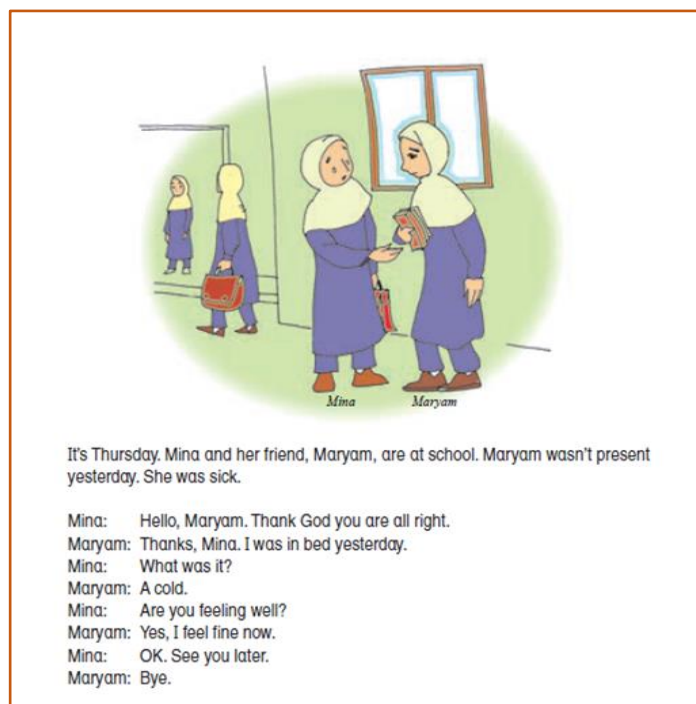
## Samples of Visual Analysis of the Dialogues of English Textbook Two:



Process	Participants	Circumstance
Action	Actor: A man pointing to a car  Goal: the car	Backgrounded building, the gate of the building, a dustbin portraying outside the building
Reaction	Reactor the man in white  Phenomenon: the other man	
Action	Actor: The man carrying an office bag  Goal: the bag	
Symbolic Attributive  Symbolizing a gentleman or an educated man or someone who is working in office in Iran	Carrier: A man with short hair and beard  Attribute: mustache and in an official suit carrying an office bag	

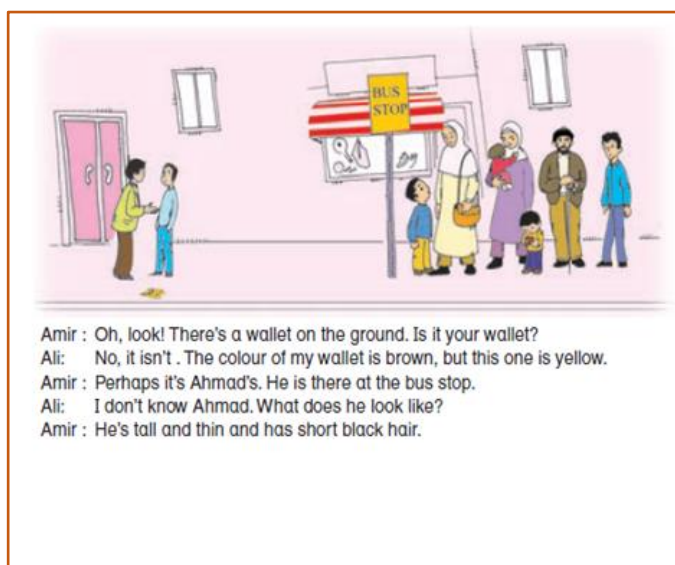


Process	Participants	Circumstance
Action	Actor: The boy in blue jacket	School building, school name board, flag of Iran a road, bus stop sign, bus, two figures portraying two students walking to school
Lifted arm to wave	Goal: hands	
Action	Actor: The boy in orange	
One foot is on the bus step and another is on the ground and it makes a vector directing to up (getting up the bus)	Goal: the bus	
Action	Actor: The boy crossing the road	
One foot is front and another is back (walking)	Goal: road	
Action	Actor: Boys carrying school bags	
	Goal: school bags	
Action	Actor: Boys in red and green walking in front of the school gate	
The pose of boys' legs : one foot is in front of the other (walking to school)	Goal: school	
Symbolic attributive	Carrier: Boys in jacket and pants carrying school bags	
	Attribute: school bag	
Analytical	Carrier: The school building	
	Attribute: school name board	



Process	Participants	Circumstance
Action	Actor: One of the girl holding some books Goal: books	A window on the back of the two foregrounded girls, the other girls wearing school uniform: portraying inside the school
Action	Actor: Girl directed her hand to another Goal: hand	
Action	Actor: Girl holding a school bag Goal: school bag	
Action	Actor: Girl is walking	
Analytical	Carrier: One of the girls wearing a worried face Attribute: Wide open eyes, down ward eyebrows, and wide open mouth	
Analytical	Carrier: The girl on the left wearing sad face Attribute: Dropped eyelids, downward eyebrows	
Symbolic attributive	Carrier: The girls wearing school uniform and carrying school bag Attribute: school bag	
Analytical	Whole image and its parts (window, students, a school gate) Carrier and Attribute	
Communication (new category)	The girl on the left directed her hand to the other girl, and facing to her	

### Samples of Visual Analysis of the Dialogues of English Textbook Three:



Process	Participants	Circumstance
Reaction	Reactor: the little boy in blue looking at the woman next to him  Phenomenon: the woman	
Reaction	Reactor :the woman in purple looking at the baby whom she is carrying  Phenomenon: the baby	
Reaction	Actor :the little boy in yellow and blue holding an object  Goal: an object	
Reaction	Reactor: little boy in yellow and blue looking at the object in his hand  Phenomenon: the object	
Reaction	Actor: a man standing in bus stop is holding a walk stick  Goal: the stick	
Action	Actor: a woman carrying a baby  Goal: the baby	
Action	Actor: a woman holding her bag  Goal: her bag	

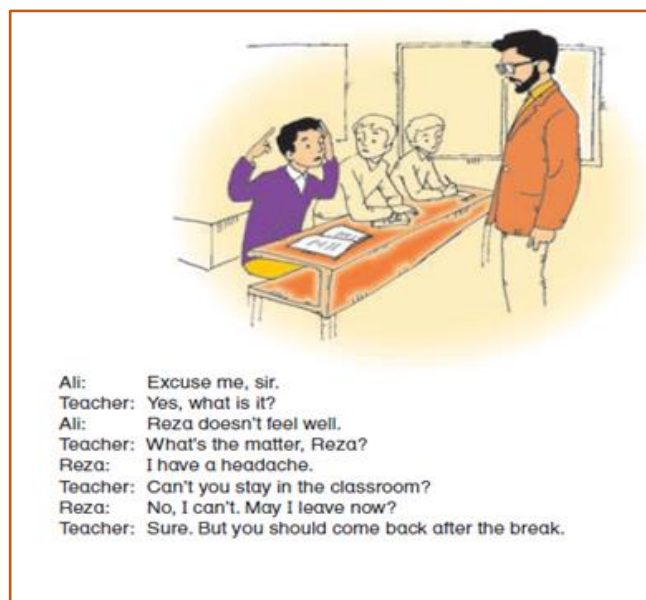
Analytical	Carrier: a boy wearing a blue shirt and jeans  Attribute: being tall and thin with black short hair	
Symbolic Attributive	Carrier: an old man with hat and jacket  Attribute: a walk stick	
Symbolic Attributive	Carrier: a woman in long dress and scarf carrying a baby  Attribute: baby	
Communication (new category)	The boy on the left directed his hand to the other boy, facing to him	



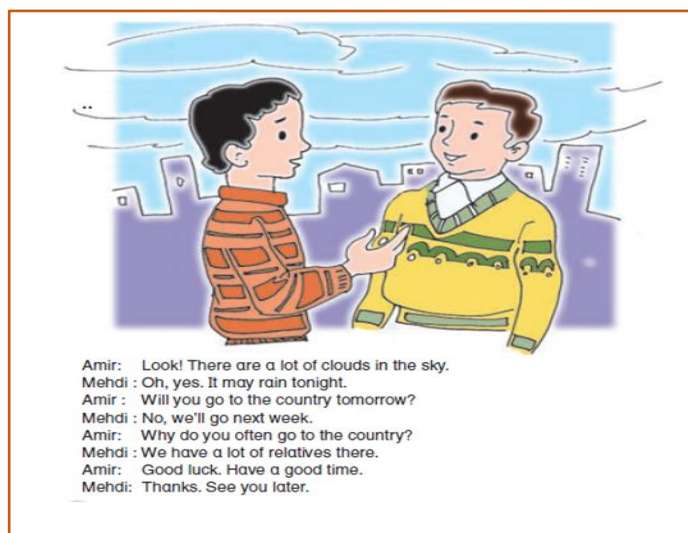


Mahin: Do you ever watch TV, Zohreh?  
 Zohreh: Yes, I usually watch TV in the evening.  
 Mahin: Did you watch the "children's program" yesterday?  
 Zohreh: Yes, I enjoyed the cartoons very much.  
 Mahin: Did you watch the news, too?  
 Zohreh: Yes, I did.  
 Mahin: Oh, when did you finish your homework?  
 Zohreh: In the afternoon.

Process	Participant	Circumstance
Verbal	Sayer: The girl on the right and a dialogue balloon in which there is a TV showing cartoon  Utterance: a TV showing cartoon	
Reaction	Reactor: The girls looking at each other  Phenomenon: the girl	
Action	Actor: the girl lifting her hand  Goal: her hand	
Action	Actor: the girl tightening her hands on her back  Goal: hands	
Communication (new category)	The girl's hand is lifted and directed to other girl, and eyelines	



Process	Participant	Circumstance
Action	Actor: The boy in purple raised his hand Goal: his hand	Bench, desk, window, boys at the desk, books on the desk, teacher
Action	Actor: The boy in purple touching his head Goal: his head	
Action	Actor: the boy at the other end of the bench is holding a pencil Goal: a pencil	
Reaction	Reactor: the boy next to the purple one looking at the boy in purple Phenomenon: the boy in purple	
Reaction	Reactor: The teacher and the boy looking at each other Phenomenon: teacher and the boy	
Analytical	Carrier: the classroom Attribute: The students at the desk and the teacher	
Analytical	Carrier: The man in formal suit opposite the class Attribute: students, desks	
Communication	The student gesturing his hand, facing to teacher	



Process	Participant	Circumstance
Reaction	Reactor: The boys looking at each other  Phenomenon: the boys	Buildings which are not depicted in details, blue sky and clouds in the sky
Action	Actor: The boy on the left lift his hand  Goal: his hand	
Action	The boy directed his hand to the other boy  Goal: the boy on the right	
Communication	The boy on the left raised his hand and directed to the other boy while talking And facing to him	
Symbolic Attribute	Carrier: The boys	
The boys are rural	Attribute: the tall buildings behind them	
Analytical	Carrier: Blue background as sky	
The cloudy sky	Attribute: curved lines	

## Appendix C

### Samples of Intersemiotic Textual Cohesion Analysis of the Dialogues in Iranian English Textbooks

#### Cohesive Device: Reference

#### English Textbook One

#### Lesson Five

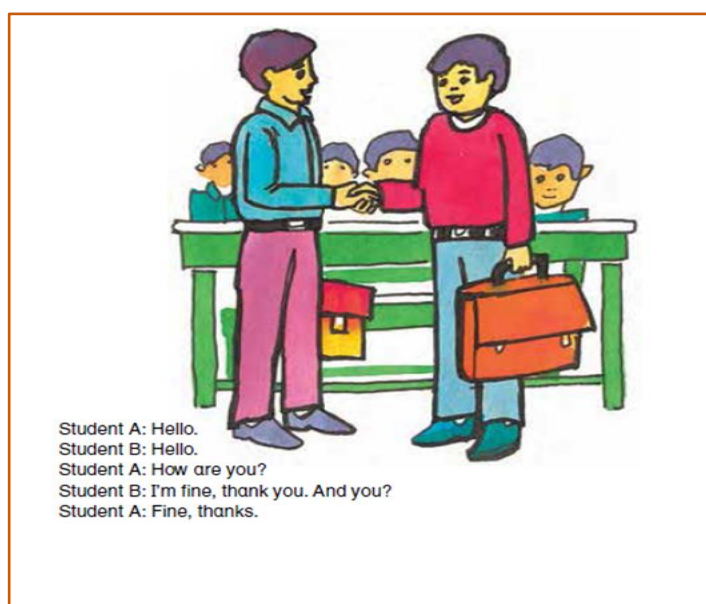
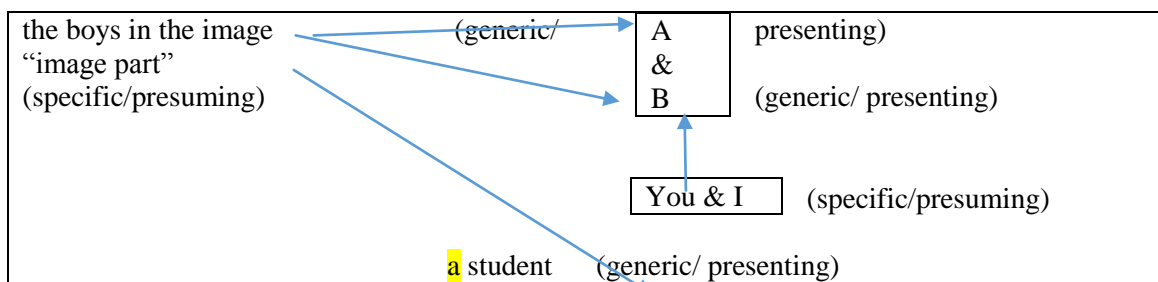
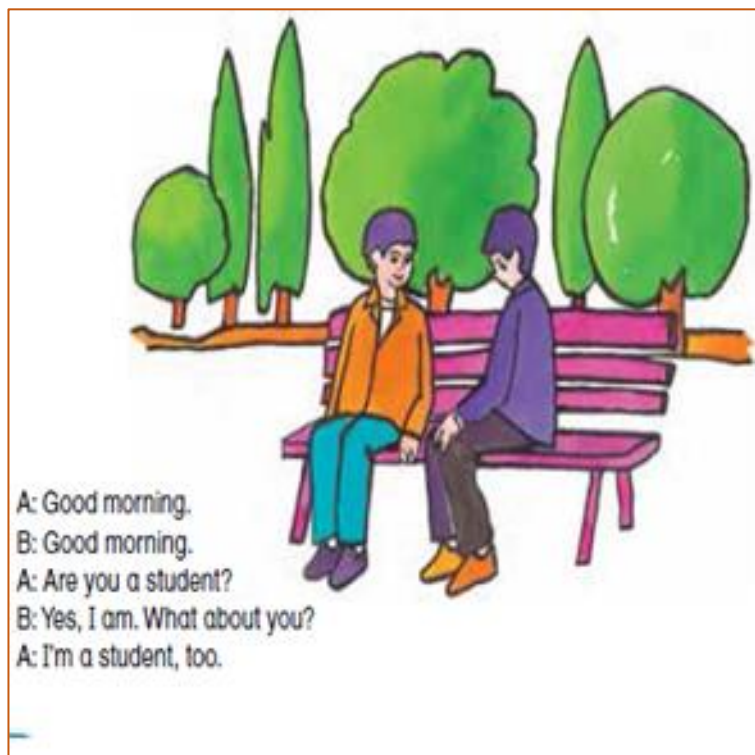


Image	Linguistic text
the boys in the image “image part” (generic/presenting)	<div>Student A &amp; Student B</div> <div>(specific/presuming)</div>

## Lesson Six



## Lesson Seven

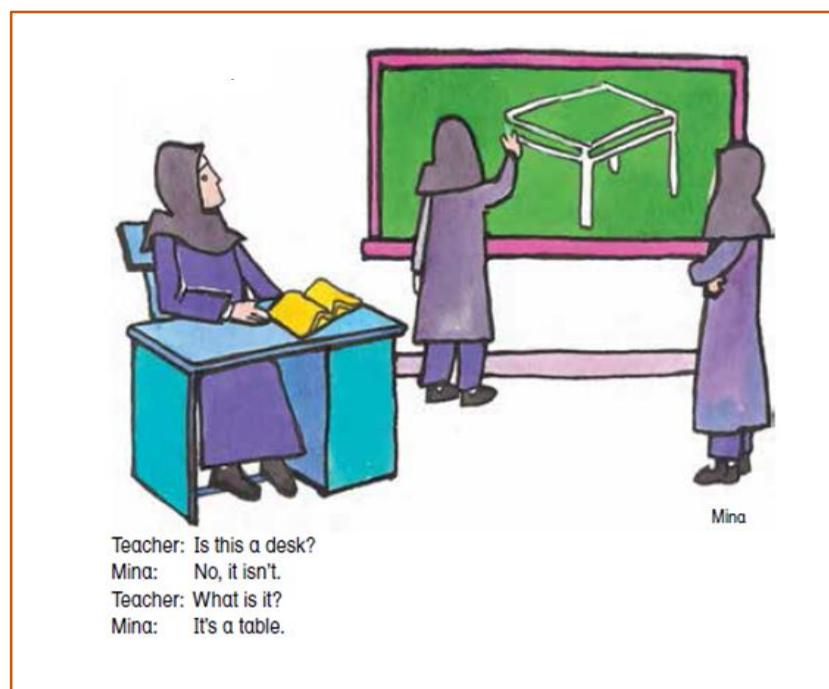


Image	Linguistic text	Label
Image part (specific/presuming)	<b>X</b> Teacher (generic/ presenting)	Mina
Image part (generic/presenting)	Mina (specific/ presuming)	
Image part (specific/presuming)	<b>a</b> table (generic/ presenting)	

## Lesson Eight

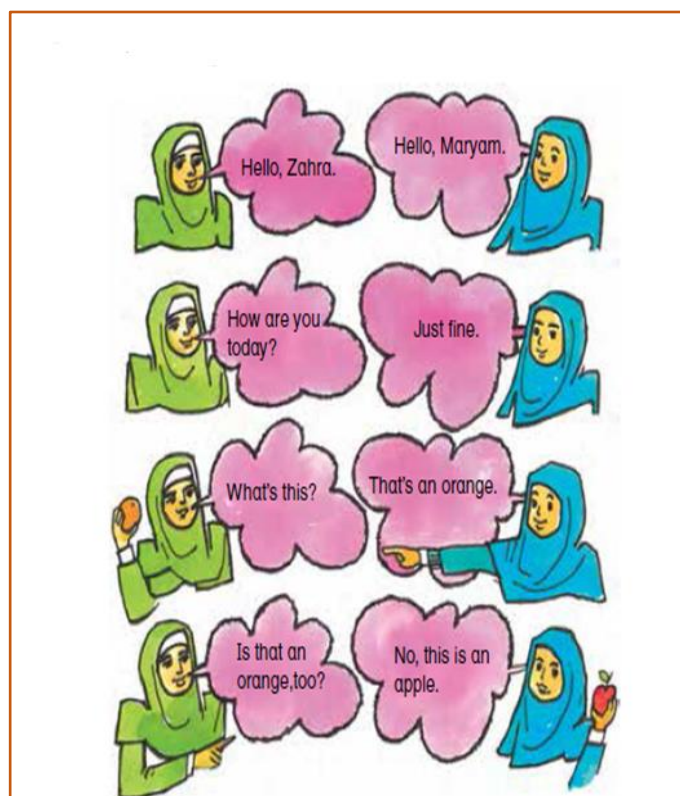


Image	Verbal text
Image on the left (generic/ presenting)	Maryam (specific/ presuming)
Image on the right (generic/presenting)	Zahra (specific/ presuming)
(generic/presenting) Image part on the left (specific/presuming)	an orange (generic/ presenting)
	<div> an orange ↑ it </div>
Image part on the right	an apple (generic/ presenting)
	<div> an apple ↑ it </div>

## Lesson Nine

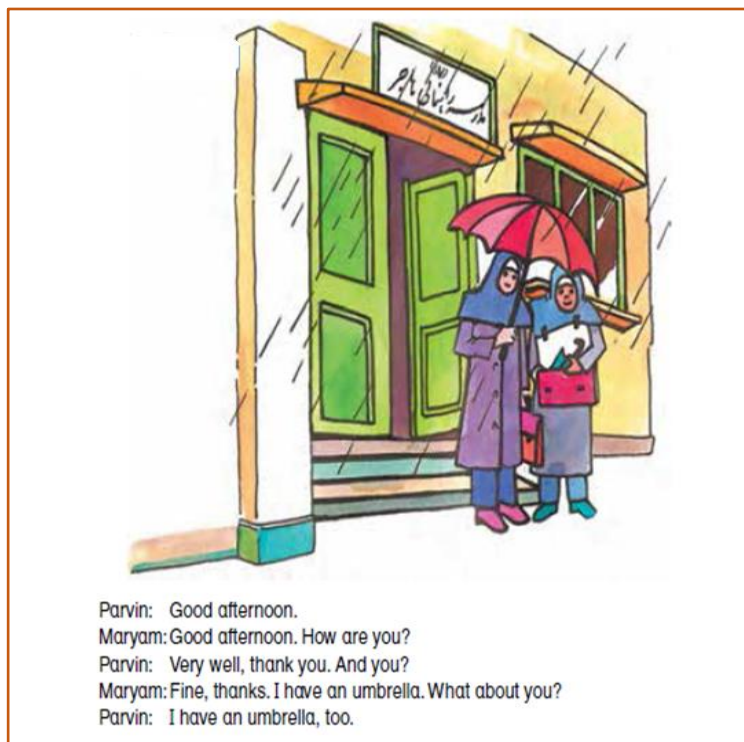



Image	Linguistic text	
Image part (generic/presenting)	Maryam ↑ I & you	(specific/ presuming)
Image part (generic/presenting)	Parvin ↑ I & you	(specific/ presuming)
Image part (specific/presuming)		an umbrella (generic/ presenting)



## Lesson Ten




Amin: Hello, Ali. How are you today?  
 Ali: Just fine. Thank you.  
 Amin: How is school?  
 Ali: It is OK.  
 Amin: Have you English today?  
 Ali: Yes, we have. What about you?  
 Amin: No, we haven't.

Image	Linguistic text	Label
The boy on the left (generic/ presenting)	Amin	Amin
	you	(specific/presuming)
The boy on the right (generic/presenting)	Ali	Ali
	you	(specific/presuming)
	Ali and his classmates	
	we	

## English Textbook Two

### Lesson One



Parvin: Excuse me. Have you a red pencil?  
 Mehri: No, I haven't.  
 Parvin: Have you a pen?  
 Mehri: Yes, I have.  
 Parvin: What colour is it?  
 Mehri: It's red. Here you are.  
 Parvin: Thank you.

Image	Linguistic text
The girl on the left (generic/ presenting)	<div>                     Parvin (specific/ presuming)                      I &amp; you                 </div>
The girl on the right (generic/presenting)	<div>                     Mehri (specific/ presuming)                      I &amp; you                 </div>

## Lesson Two

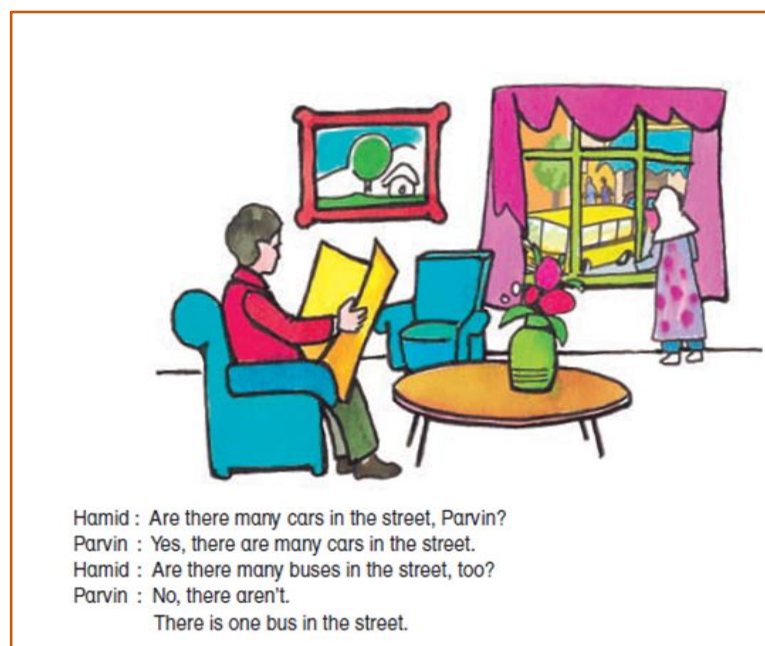


Image	Linguistic text
the man image part (generic/ presenting)	Hamid (specific/ presuming) I & you
the woman image part (generic/presenting)	Parvin (specific/ presuming) I & you
yellow bus Image part (specific/ presuming)	One bus(generic/ presenting)
Pink car Image part (specific/ presuming)	X cars(generic/ presenting)
Street Image part (generic/ presenting)	The street (specific/ presuming)

## Lesson Three



A: Hello, I am Hossein Karami.  
 What's your name?  
 B: My name is Nasser Omid.  
 A: Is that your car?  
 B: No, it isn't.  
 A: Whose car is it?  
 B: It's Ali's. He is my brother.

Image	Linguistic text
the man on the right image part (specific/ presuming)  (generic/ presenting)	<div>             A (generic/ presenting)              Hossein Karami (specific/ presuming)              I           </div>
(specific/ presuming) the man on the left image part (generic/ presenting)	<div>             B (generic/ presenting)              Nasser Omid (specific/ presuming)              My name           </div>
car Image part (specific/ presuming)	<div>             car (generic/ presenting)              that              Ali's              it           </div>

## Lesson Four

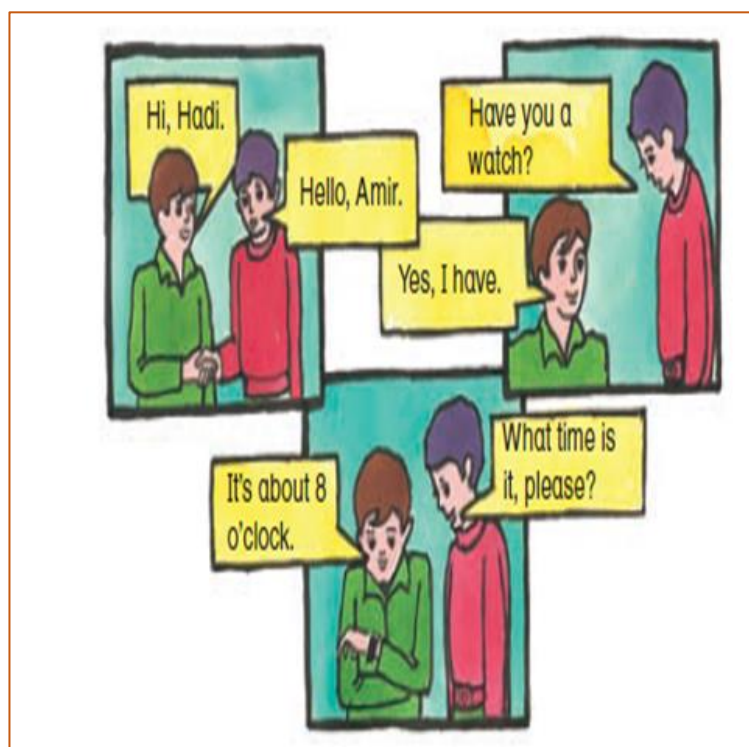


Image	Linguistic text
the boy on the right image part (generic/ presenting)	Hadi (specific/ presuming)
the boy on the left image part (generic/ presenting)	Amir (specific/ presenting) I & you
watch Image part (specific/ presuming)	a watch(generic/ presenting)

## Lesson Five

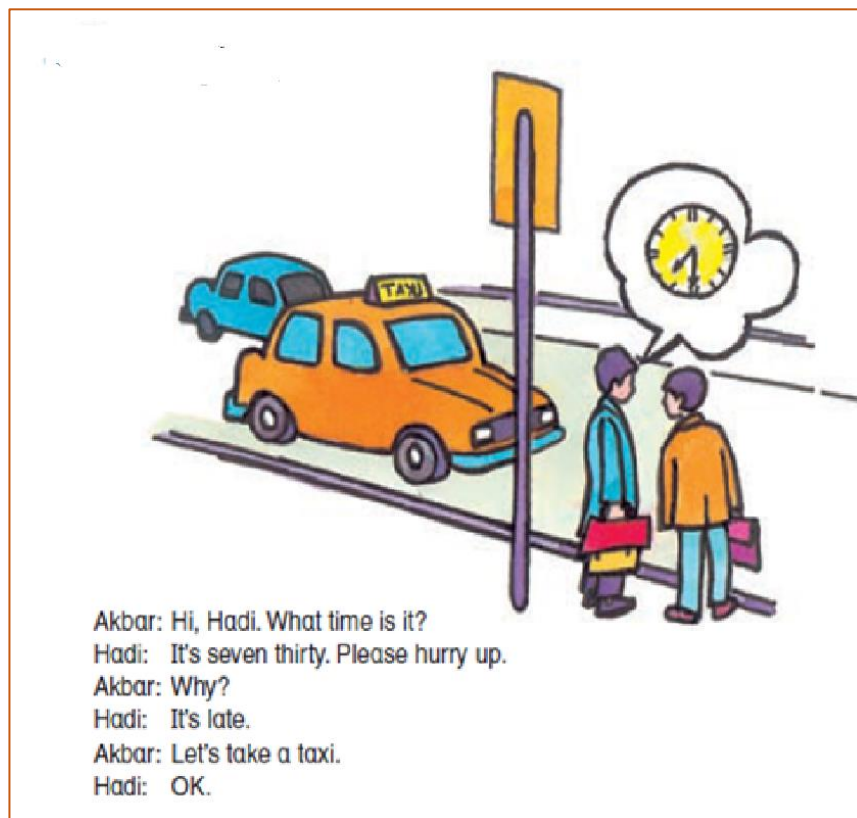



Image	Linguistic text
the boy on the right image part (generic/ presuming)	Akbar (specific/ presenting)
the boy on the left image part (generic/ presuming)	Hadi (specific/ presenting)
clock on the boy's head Image part (specific/ presuming)	time(generic/ presenting) seven thirty
Taxi Image part (specific/ presuming)	A taxi (generic/ presenting)

## Lesson Six



Mansoor: Hi, Akbar.  
 Akbar: Hi.  
 Mansoor: This is my school.  
 Akbar: I go to Farabi School.  
 Mansoor: I walk to school every day.  
 Akbar: But I go by bus.  
 Mansoor: Nice to see you.  
 Akbar: Goodbye. See you tomorrow.

Image	Linguistic text
the boy on the right image part (generic/ presuming)	Reza (specific/ presuming)
the boy on the left image part (generic/ presuming)	Ali (specific/ presuming) I & you
farmer Image part (specific/ presuming)	a farmer (generic/ presenting) my father
teacher Image part (specific/ presuming)	a teacher (generic/ presenting) he your father he
English words on the board (generic/ presenting)	English (specific/presuming)



## Lesson Seven

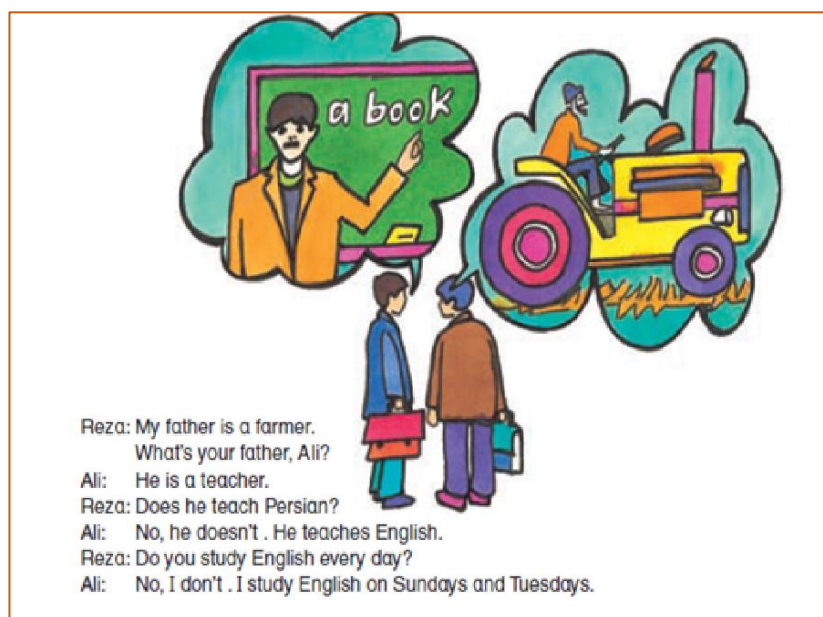



Image	Linguistic text
the boy on the right image part (generic/ presenting)	Reza (specific/ presuming)
the boy on the left image part (generic/ presenting)	Ali (specific/ presuming) I & you
farmer Image part (specific/ presuming)	a farmer (generic/ presenting) my father
teacher Image part (specific/ presuming)	a teacher (generic/ presenting) he your father he
English words on the board (generic/ presenting)	English (specific/presuming)




## Lesson Eight



Reza: Who is that man, Ali?  
 Ali: He is Mr Hamidi.  
 Reza: What is he?  
 Ali: He is our teacher.  
 Reza: Where does he live?  
 Ali: He lives on Azadi Street.  
 Reza: How many students does he teach?  
 Ali: He teaches many students.

Image	Linguistic text
one of the boys image part (generic/presenting)	Reza (specific/ presuming) I & you
one of the boys image part (generic/ presuming)	Ali (specific/ presuming) I
school Image part (generic/presenting)	that man (specific/ presuming) Mr. Hamidi He Our teacher

## Lesson Nine



*Ali is talking to Reza.*

Ali: Hello.  
 Reza: Hello. Is that Ali?  
 Ali: Yes. Who's speaking?  
 Reza: This is Reza.  
 Ali: Hello, Reza. What are you doing?  
 Reza: I'm studying.  
 Ali: English or Persian?  
 Reza: English.  
 Ali: Do you study English every day?  
 Reza: No, not every day. But I'm practicing it now.  
 Ali: Oh, \*mum's calling. Thank you, goodbye.  
 Reza: Goodbye.

Image	Linguistic text	Caption
the boy on the left image part (generic/ presenting)	<div> Ali (specific/ presuming)  I &amp; you </div>	Ali
the boy on the right image part (generic/ presenting)	<div> Reza (specific/ presuming)  This &amp; I </div>	Reza

## Lesson Ten



It's Thursday. Mina and her friend, Maryam, are at school. Maryam wasn't present yesterday. She was sick.

Mina: Hello, Maryam. Thank God you are all right.

Maryam: Thanks, Mina. I was in bed yesterday.

Mina: What was it?

Maryam: A cold.

Mina: Are you feeling well?

Maryam: Yes, I feel fine now.

Mina: OK. See you later.

Maryam: Bye.

Image	Linguistic text	Caption	label
the girl on the right image part (generic/ presenting)	Maryam (specific/ presuming) I & you	Maryam	Maryam
the girl on the left image part (generic/ presenting)	Mina (specific/ presuming)	Mina	Mina
Image (specific/ presuming)	X school (generic/ presenting)		

## English Textbook Three

### Lesson One

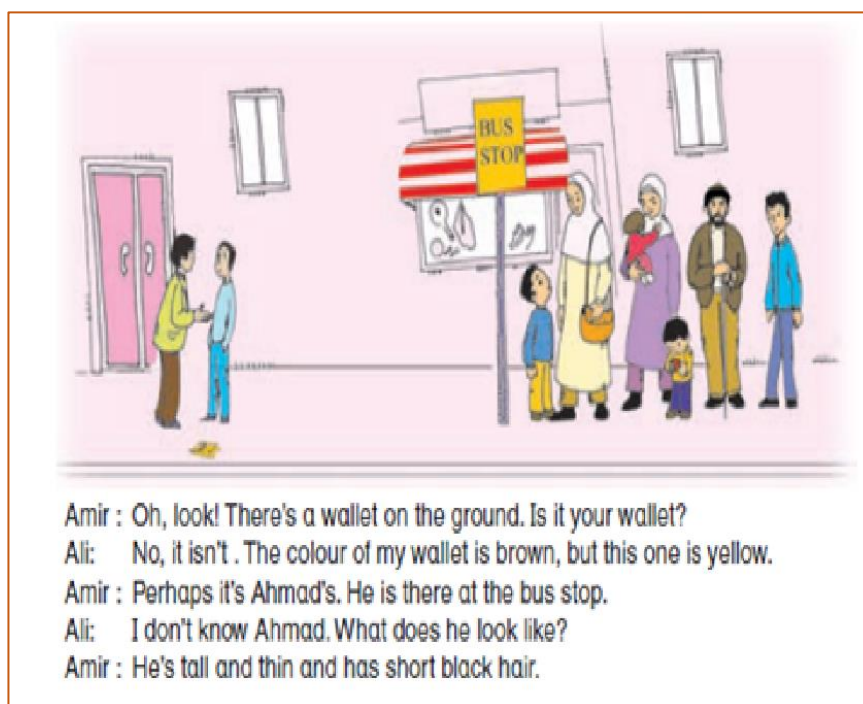
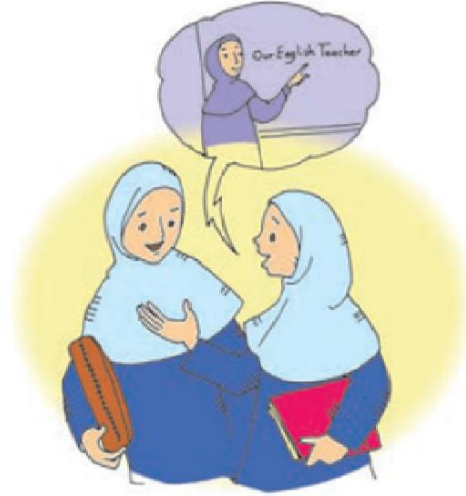


Image	Linguistic text	Caption	Label
the boy in green image part (generic/ presenting)	Amir (specific/ presuming)		
the boy in blue image part (generic/ presenting)	Ali (specific/presuming)		
The tall boy in blue at the bus stop (generic/ presenting)	Ahmad (specific/presuming)		
Yellow wallet on the ground (specific/ presuming) (specific/presenting)	a wallet (generic/ presuming) Ahmad's wallet		
Bus stop (generic/ presenting)			
	The bus stop (specific/presuming)		

## Lesson Two



Nahid: Do you know our new teacher?  
 Zahra: No, I don't. Who's she?  
 Nahid: Mrs Tehrani. She teaches us English.  
 Zahra: Is she a good teacher?  
 Nahid: Yes, she is. All the students like her very much.  
 Zahra: Does she speak Persian in the classroom?  
 Nahid: No, she usually speaks English.

Image	Linguistic text
the girl on the right image part (generic/ presenting)	Nahid (specific/ presuming)
the girl on the left image part (generic/ presenting)	Zahra (specific/presuming) I & you
Teacher in balloon (generic/ presenting)	Our teacher (specific/presuming) Mrs. Tehrani she her
English words on the board (generic/presenting)	English (specific/ presuming)
Classroom (generic/presenting)	The classroom (specific/ presuming)

### Lesson Three



- What are you doing, mother?
- I'm cooking lunch. We have some guests today.
- How many guests do we have?
- Five. Your uncle and his family.
- Can I help you?
- Yes, get me some rice.
- Where is it?
- In the closet.
- How much do you need?
- About two kilos.
- All right.

Image	Linguistic text
the woman on the right image part (specific/ presuming)	<div> X mother(generic/ presenting) </div> <div> I &amp; you </div>
Closet (generic/ presenting)	<div> The closet (specific/ presuming) </div>

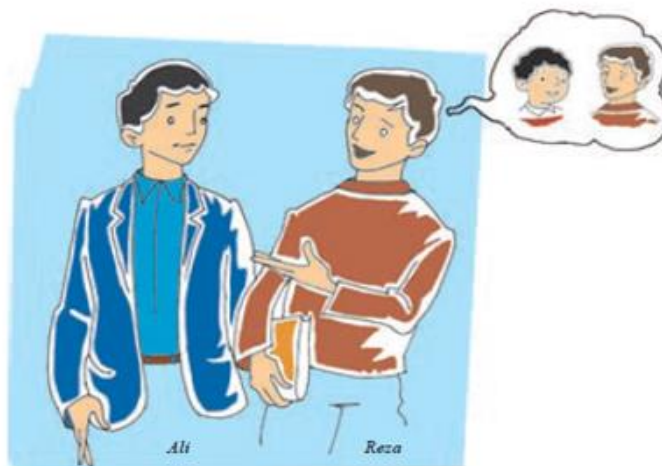
## Lesson Four



Mahin: Do you ever watch TV, Zohreh?  
 Zohreh: Yes, I usually watch TV in the evening.  
 Mahin: Did you watch the children's program\* yesterday?  
 Zohreh: Yes, I enjoyed the cartoons very much.  
 Mahin: Did you watch the news, too?  
 Zohreh: Yes, I did.  
 Mahin: Oh, when did you finish your homework?  
 Zohreh: In the afternoon.

Image	Linguistic text
the woman on the right image part (generic/ presenting)	Mina (specific/ presuming) I & you
the girl on the left image part (generic/ presenting)	Zohreh (specific/ presenting)
TV (specific/ presuming)	
cartoons (generic/ presenting)	TV (generic/ presenting)
	The cartoons (specific/ presuming)

## Lesson Five




Ali: Hello, Reza. How are you today?  
 Reza: Not too bad.  
 Ali: Did you see Peyman yesterday?  
 Reza: No. I saw him this morning.  
 Ali: What did you talk about?  
 Reza: We talked about many things.  
 Ali: Is he in your class?  
 Reza: No, he is in grade two.

Image	Linguistic text	label
the boy on the left image part (generic/ presenting)	Ali (specific/ presuming) I & you	Ali
the boy on the right image part (generic/ presenting)	Reza (specific/ presuming)	Reza
the boy in the balloon (generic/ presenting)	Peyman (specific/ presuming)	




## Lesson Six



Nahid: Did you see the film yesterday evening?  
 Mehri: No, I didn't. I was helping my mother.  
 Nahid: What was she doing?  
 Mehri: She was cooking dinner.  
 Nahid: What did you do?  
 Mehri: I washed the dirty dishes.  
 Nahid: Did you wash all of them?  
 Mehri: Yes, I did.

Image	Linguistic text	Caption	label
the boy on the left image part (generic/ presenting)	Nahid(specific/ presuming)		
the boy on the right image part (generic/ presenting)	Mehri (specific/ presuming)		
the woman in the balloon(generic/ presenting)	I & you		
pot on the stove (generic/ presenting)	My mother(specific/ presuming) she		
Dishes in the balloon (generic/ presenting)	dinner (specific/ presuming)		
	The dirty dishes(specific/ presuming) them		

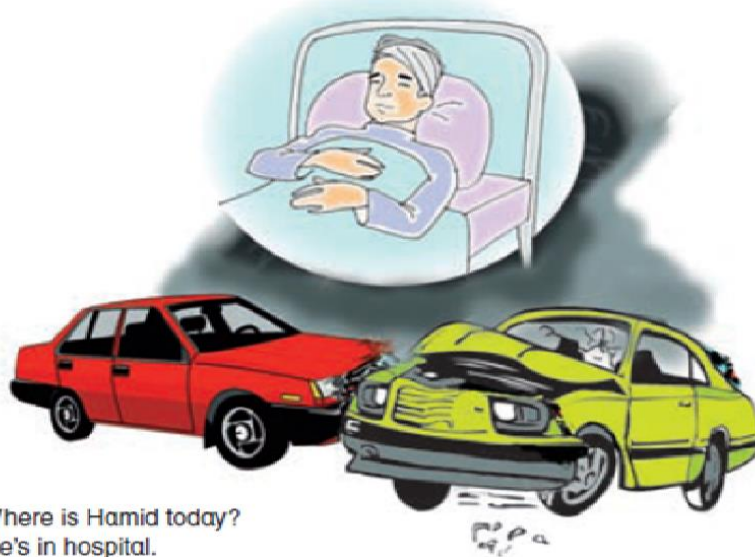
## Lesson Seven



Ali: Excuse me, sir.  
 Teacher: Yes, what is it?  
 Ali: Reza doesn't feel well.  
 Teacher: What's the matter, Reza?  
 Reza: I have a headache.  
 Teacher: Can't you stay in the classroom?  
 Reza: No, I can't. May I leave now?  
 Teacher: Sure. But you should come back after the break.

Image	Linguistic text
the man image part (specific/ presuming)	XTeacher (generic/preseting)
the boy on the right image part (generic/ presenting)	Ali (specific/ presuming)
the boy on the left (generic/ presenting)	Reza(specific/ presuming)
Students and desks (generic/ presenting)	The classroom (specific/ presuming)

## Lesson Eight



A: Where is Hamid today?  
 B: He's in hospital.  
 A: Why?  
 B: He had a car accident yesterday.  
 A: That's too bad. Is he a careless driver?  
 B: No, he usually drives carefully.  
 A: Was he driving carelessly yesterday?  
 B: Yes, he was driving fast.

Image	Linguistic text
the man image part (generic/ presenting)	Hamid (specific/ presuming) ↓ a careless driver ↑ he
The bed image part (specific/ presuming)	Hospital (generic/ presenting)
the boy on the left (specific/ presuming)	a car accident (generic/ presenting)

## Lesson Nine

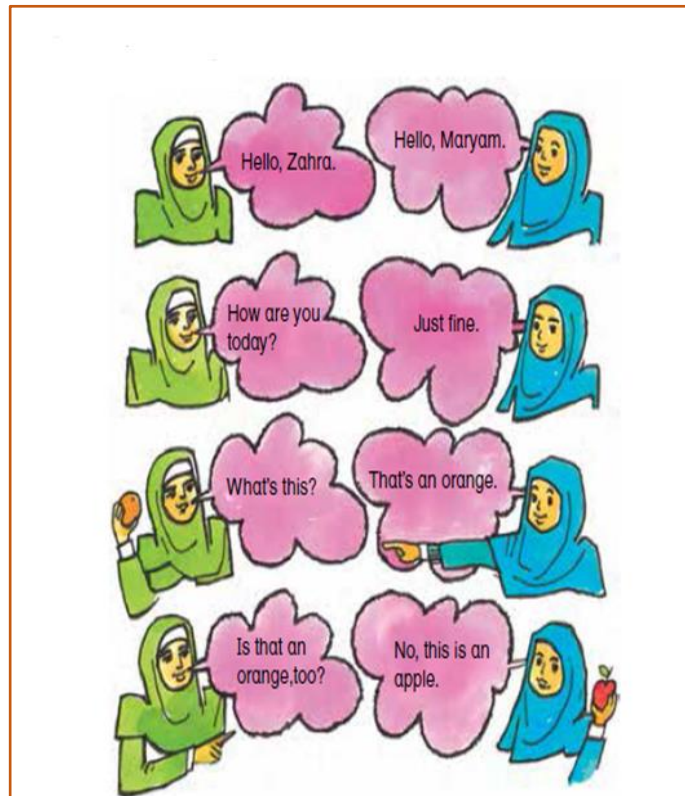


Amir: Look! There are a lot of clouds in the sky.  
 Mehdi: Oh, yes. It may rain tonight.  
 Amir: Will you go to the country tomorrow?  
 Mehdi: No, we'll go next week.  
 Amir: Why do you often go to the country?  
 Mehdi: We have a lot of relatives there.  
 Amir: Good luck. Have a good time.  
 Mehdi: Thanks. See you later.

Image	Linguistic text
one of the boy image part (generic/ presenting)	Amir (specific/ presuming)
one of the boy (generic/ presenting)	Mehdi (specific/ presuming) you
clouds image part (specific/ presuming)	A lot of clouds(generic/ presenting)
sky (generic/ presenting)	The sky(specific/ presuming)

## Cohesive Device: Parallel Structure

### English Textbook One



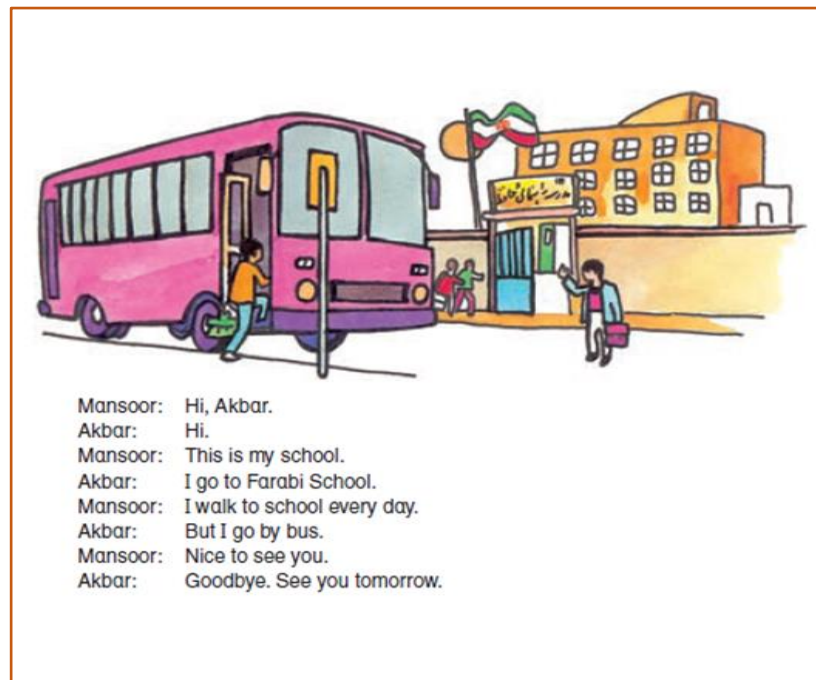
\_An orange round object is in Maryam's hand which can be analytically realized as an orange. Zahra answers to Maryam that: ***"That's an orange"***

Here, analytical process is in parallel with the attributive relational process.

\_ There is an apple in Zahra's hand. The shape of the object in her hand is easily understood as an apple; round, red, with a leaf and stick on the top. Zahra says that ***"This's an apple"***

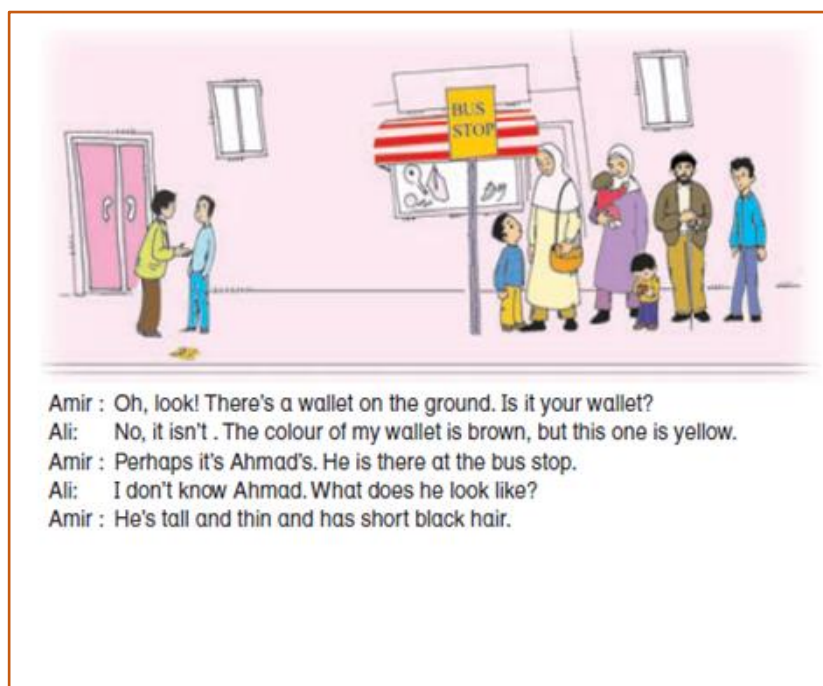
Here, again analytical process of the image of the apple is parallel with attributive relational process in text.

## English Textbook Two



One of the boy (Mansoor) is walking across the street and the other boy (Akbar) is getting up the bus so he is going by bus. These two are categorized as Action process in the image which is parallel with the Material process of verbal analysis. In former example, Mansoor is Actor and in latter one, Actor is Akbar and the bus is Goal. Besides, in Material clause: **“I walk to school every day”**, Actor is “I” (referring to Mansoor) and in the other clause: **“I go by bus”**, Actor is I (referring to Akbar). The two process, Action and Material, are parallel in this text since both have same Actors and Processes.

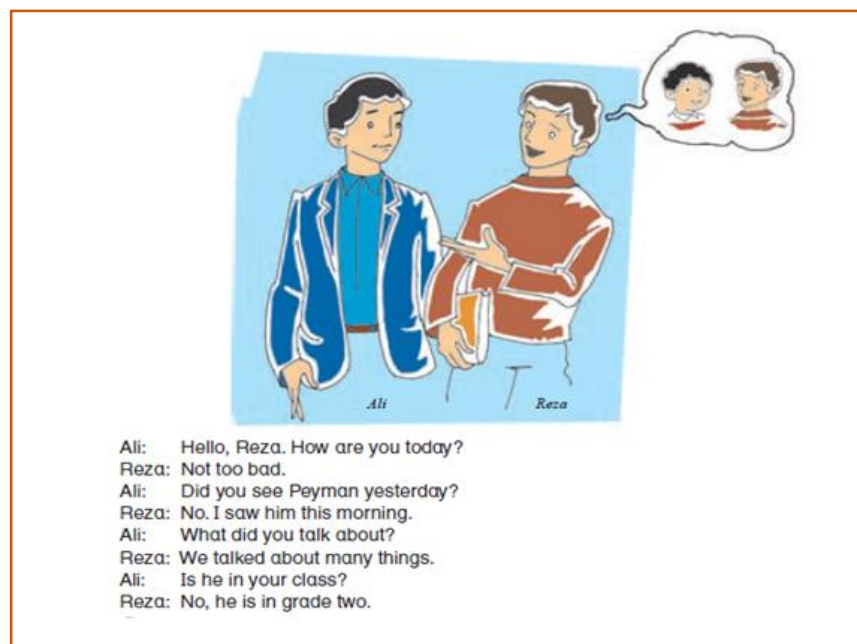
### English Textbook Three



There exists something yellow in the image but its identity is not clear enough. The yellow object is near the two boys on the ground. According to analytical process, the object is Carrier and being on the ground, near the boys and yellow is Attribute. In verbal text, the clause: ***“there is a wallet on the ground.”*** that is an Existential clause in which ‘a wallet’ is Existent. Moreover, there is another clause: “this one is yellow” which is an Attributive Relational clause where ‘this one’ is Carrier and ‘yellow’ is Attribute. These two verbal clauses can be parallel with the part of image.

On the most left of the image, there is a boy in blue who seems thin and tall and has black short hair. The boy is Carrier and tallness, thinness as well as possessing short black hair are Attributes which characterise the boy in an Analytical process. The Analytical process in the image is parallel with the clause: ***“He’s tall and thin and has short black hair.”*** where ‘He’ is Carrier and ‘tall and thin and short black hair’ are Possessive Attributes of such an Attributive Relational clause.





In the balloon there are two boys who face and look at each other. Their eyelines make a double headed vector to depict the interaction between the two boys. The two boys can be both as Reactor and Phenomenon. Such visual process is in parallel with Mental process of the clause: ***“I saw him this morning”*** where ‘I’ is Senser and ‘him’ is Phenomenon.



## Appendix D

### Dialogue Sections of English Textbook One

# LESSON FIVE

## Hello.



Dialogue \*



Student A: Hello.

Student B: Hello.

Student A: How are you?

Student B: I'm fine, thank you. And you?

Student A: Fine, thanks.

## LESSON SIX

### Are you a student?



#### Dialogue



A: Good morning.

B: Good morning.

A: Are you a student?

B: Yes, I am. What about you?

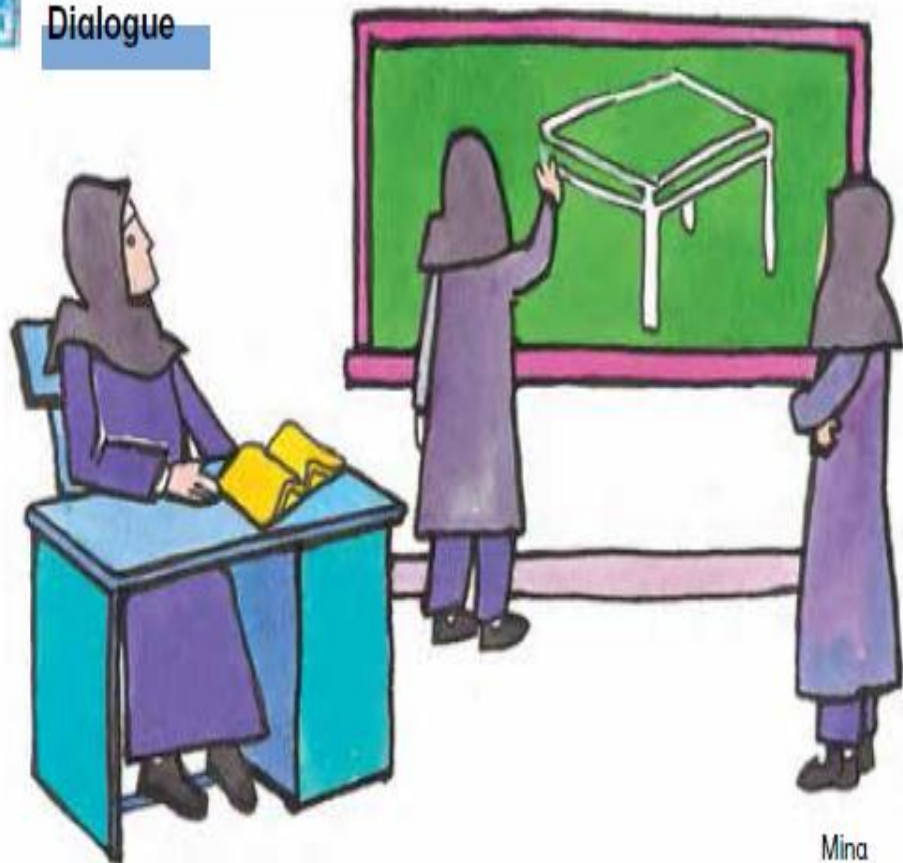
A: I'm a student, too.

# LESSON SEVEN

## Is this a desk?



### Dialogue



Mina

Teacher: Is this a desk?

Mina: No, it isn't.

Teacher: What is it?

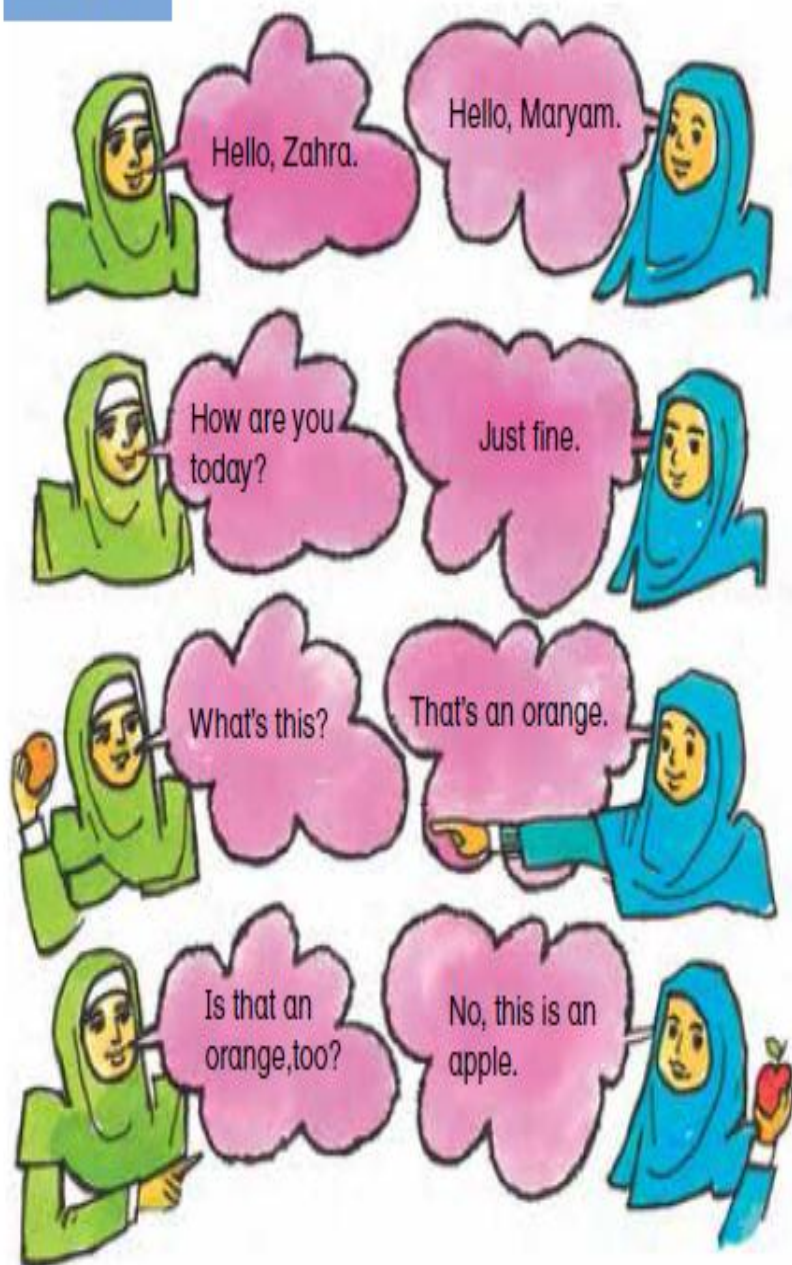
Mina: It's a table.

# LESSON EIGHT

## What is this?



### Dialogue





# LESSON NINE

## I have an umbrella.



### Dialogue



Parvin: Good afternoon.

Maryam: Good afternoon. How are you?

Parvin: Very well, thank you. And you?

Maryam: Fine, thanks. I have an umbrella. What about you?

Parvin: I have an umbrella, too.

# LESSON TEN

## Have you English today?



### Dialogue



Amin: Hello, Ali. How are you today?

Ali: Just fine. Thank you.

Amin: How is school?

Ali: It is OK.

Amin: Have you English today?

Ali: Yes, we have. What about you?

Amin: No, we haven't.

## LESSON ONE

### What colour\* is it?



#### Dialogue



Parvin: Excuse me. Have you a red pencil?

Mehri: No, I haven't.

Parvin: Have you a pen?

Mehri: Yes, I have.

Parvin: What colour is it?

Mehri: It's red. Here you are.

Parvin: Thank you.



## LESSON TWO

### Many cars



#### Dialogue



Hamid : Are there many cars in the street, Parvin?

Parvin : Yes, there are many cars in the street.

Hamid : Are there many buses in the street, too?

Parvin : No, there aren't.

There is one bus in the street.



## LESSON THREE

### What's your name?



#### Dialogue



A: Hello, I am Hossein Karami.

What's your name?

B: My name is Nasser Omid.

A: Is that your car?

B: No, it isn't.

A: Whose car is it?

B: It's Ali's. He is my brother.

# LESSON FOUR

## What time is it?



### Dialogue



## LESSON FIVE

Please hurry up.



### Dialogue



Akbar: Hi, Hadi. What time is it?

Hadi: It's seven thirty. Please hurry up.

Akbar: Why?

Hadi: It's late.

Akbar: Let's take a taxi.

Hadi: OK.

## LESSON SIX

### I go to Farabi School.



#### Dialogue



Mansoor: Hi, Akbar.

Akbar: Hi.

Mansoor: This is my school.

Akbar: I go to Farabi School.

Mansoor: I walk to school every day.

Akbar: But I go by bus.

Mansoor: Nice to see you.

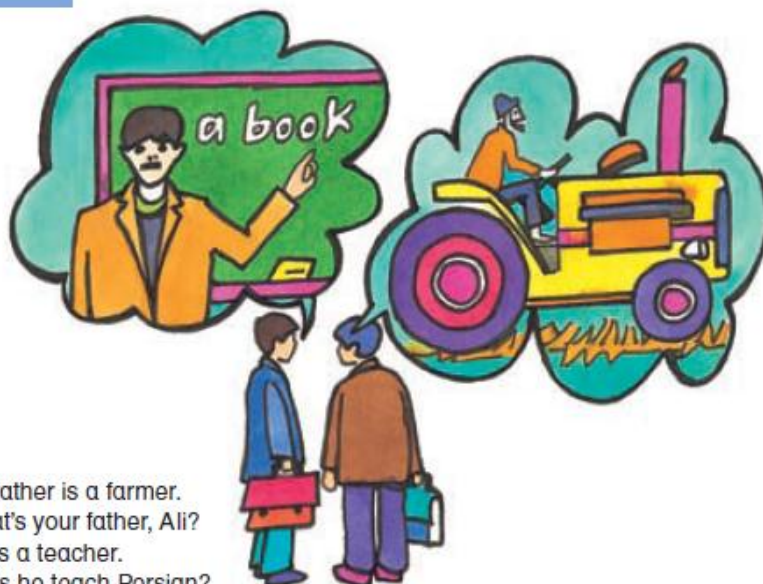
Akbar: Goodbye. See you tomorrow.

## LESSON SEVEN

### What's your father?



#### Dialogue



Reza: My father is a farmer.

What's your father, Ali?

Ali: He is a teacher.

Reza: Does he teach Persian?

Ali: No, he doesn't. He teaches English.

Reza: Do you study English every day?

Ali: No, I don't. I study English on Sundays and Tuesdays.



# LESSON EIGHT

## Who is that man?



### Dialogue



Reza: Who is that man, Ali?  
Ali: He is Mr Hamidi.  
Reza: What is he?  
Ali: He is our teacher.  
Reza: Where does he live?  
Ali: He lives on Azadi Street.  
Reza: How many students does he teach?  
Ali: He teaches many students.

# LESSON NINE

## Who is speaking?



### Dialogue



*Ali is talking to Reza.*

Ali: Hello.  
Reza: Hello. Is that Ali?  
Ali: Yes. Who's speaking?  
Reza: This is Reza.  
Ali: Hello, Reza. What are you doing?  
Reza: I'm studying.  
Ali: English or Persian?  
Reza: English.  
Ali: Do you study English every day?  
Reza: No, not every day. But I'm practicing it now.  
Ali: Oh, \*mum's calling. Thank you, goodbye.  
Reza: Goodbye.

# LESSON TEN

## I was sick yesterday.



### Dialogue



It's Thursday. Mina and her friend, Maryam, are at school. Maryam wasn't present yesterday. She was sick.

Mina: Hello, Maryam. Thank God you are all right.

Maryam: Thanks, Mina. I was in bed yesterday.

Mina: What was it?

Maryam: A cold.

Mina: Are you feeling well?

Maryam: Yes, I feel fine now.

Mina: OK. See you later.

Maryam: Bye.



# LESSON ONE



## Dialogue

### Ahmad's Wallet



Amir : Oh, look! There's a wallet on the ground. Is it your wallet?

Ali: No, it isn't . The colour of my wallet is brown, but this one is yellow.

Amir : Perhaps it's Ahmad's. He is there at the bus stop.

Ali: I don't know Ahmad. What does he look like?

Amir : He's tall and thin and has short black hair.

# LESSON TWO

## Dialogue

### Our English Teacher



Nahid: Do you know our new teacher?

Zahra: No, I don't. Who's she?

Nahid: Mrs Tehrani. She teaches us English.

Zahra: Is she a good teacher?

Nahid: Yes, she is. All the students like her very much.

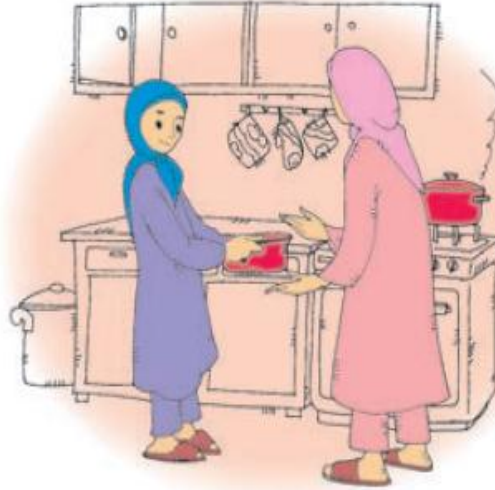
Zahra: Does she speak Persian in the classroom?

Nahid: No, she usually speaks English.

# LESSON THREE

Dialogue.

## How much or How many?



- What are you doing, mother?
- I'm cooking lunch. We have some guests today.
- How many guests do we have?
- Five. Your uncle and his family.
- Can I help you?
- Yes, get me some rice.
- Where is it?
- In the closet.
- How much do you need?
- About two kilos.
- All right.

# LESSON FOUR

## Dialogue

**I enjoyed the cartoons.**

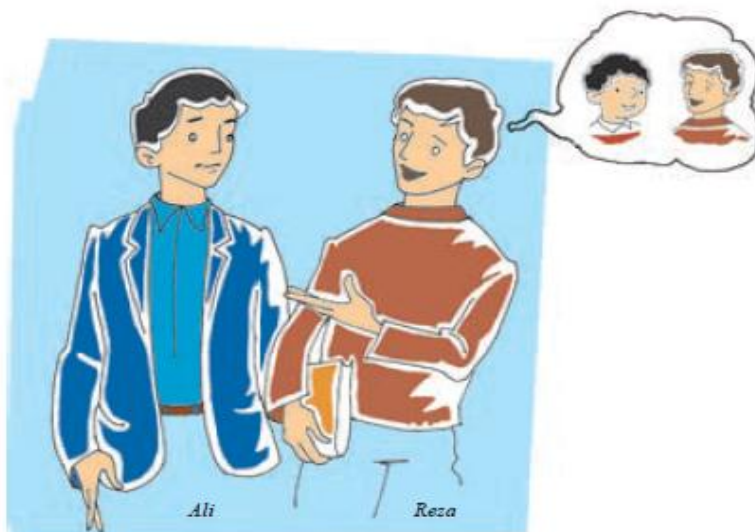


Mahin: Do you ever watch TV, Zohreh?  
Zohreh: Yes, I usually watch TV in the evening.  
Mahin: Did you watch the children's program\* yesterday?  
Zohreh: Yes, I enjoyed the cartoons very much.  
Mahin: Did you watch the news, too?  
Zohreh: Yes, I did.  
Mahin: Oh, when did you finish your homework?  
Zohreh: In the afternoon.

# LESSON FIVE

## Dialogue

**I saw him this morning.**



Ali: Hello, Reza. How are you today?

Reza: Not too bad.

Ali: Did you see Peyman yesterday?

Reza: No. I saw him this morning.

Ali: What did you talk about?

Reza: We talked about many things.

Ali: Is he in your class?

Reza: No, he is in grade two.

# LESSON SIX

## Dialogue

**I was helping my mother.**



Nahid: Did you see the film yesterday evening?  
Mehri: No, I didn't. I was helping my mother.  
Nahid: What was she doing?  
Mehri: She was cooking dinner.  
Nahid: What did you do?  
Mehri: I washed the dirty dishes.  
Nahid: Did you wash all of them?  
Mehri: Yes, I did.



# LESSON SEVEN

## Dialogue

### May I leave the classroom?



Ali: Excuse me, sir.  
Teacher: Yes, what is it?  
Ali: Reza doesn't feel well.  
Teacher: What's the matter, Reza?  
Reza: I have a headache.  
Teacher: Can't you stay in the classroom?  
Reza: No, I can't. May I leave now?  
Teacher: Sure. But you should come back after the break.

# LESSON EIGHT

## Dialogue

**He usually drives carefully.**



A: Where is Hamid today?

B: He's in hospital.

A: Why?

B: He had a car accident yesterday.

A: That's too bad. Is he a careless driver?

B: No, he usually drives carefully.

A: Was he driving carelessly yesterday?

B: Yes, he was driving fast.



# LESSON NINE

## Dialogue

**We'll go next week.**



Amir: Look! There are a lot of clouds in the sky.

Mehdi : Oh, yes. It may rain tonight.

Amir : Will you go to the country tomorrow?

Mehdi : No, we'll go next week.

Amir: Why do you often go to the country?

Mehdi : We have a lot of relatives there.

Amir: Good luck. Have a good time.

Mehdi: Thanks. See you later.